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# Finance Booklet

This booklet has been made so that a calculator will not be required unless otherwise stated.

# Contents

# Chapter 1: Basic Wages

1. For each of the following calculate the person's weekly salary.

(a)     Amal works for 30 hours this week earning £7.40 an hour.

(b)     Thomas works for 40 hours this week and earns £8.45 an hour.

(c)     Mariam works for 35 hours this week and earns £10.50 an hour.

(d)     Heather works for 42 hours this week and earns £9.50 an hour.

(e)     Paul has a weekly salary of £12.60, how much will he earn if he works 20 hours this week.

(f)     Freya earns £8.50 an hour. How much will she make if she works for 36 hours.

(g)     Ian works for 50 hours in a week. If he is paid £9.25 per hour, how much will he make this week?

(h)     Ryan has a weekly salary of £14.20. If he works 30 hours this week how much will he make?

(i)     Orla works for 25 hours this week. If she earns £7.35 an hour, how much will she make?

(j)     Eilidh works for 35 hours this week. If she earns £8.85 an hour, what will her weekly salary be?

(k)     William works for 45 hours this week. If he earns £9.40 an hour, what will his weekly salary be?

(l)     Harper works for 25 hours this week. If she earns £11.30 an hour, how much will she make this week?

(m)     Tiya earns £9.60 an hour. How much will she make if works 35 hours this week?

(n)     Alex earns £7.85 an hour. How much will he make if he works 42 hours this week?


2.     The following will show the monthly salary, calculate their annual salary.

(a)     David - £3,400
(b)     Emma - £1,350
(c)     Amanda - £2,550
(d)     Mo - £1,560

3.      The following will show the weekly salary, taking there to be 52 weeks in the way calculate the annual salary.

(a)     Simon - £500
(b)     Samantha - £1100
(c)     Roger - £600
(d)     Martha - £925


4. From the following the annual salaries, calculate the monthly salary.

(a)     £19,200
(b)     £18,000
(c)     £31,200
(d)     £38,400


5. Jim works the following shifts this week.
        Mon-Wed 9am – 4pm
        Fri: 9am – 4pm
        Sat: 10am – 5pm
If Jim is paid £8.50 an hour, how much will he earn this week?

6. Alison work the following shifts this week.
        Tues: 9am – 5pm
        Wed-Sat: 8am – 4pm
        Sun: 7am – 5pm
If Alison is paid £9.25 an hour, how much will she earn this week?

7. Jamie works the following shifts
        Mon-Wed: 5pm – midnight
        Friday: 7pm – 1am
        Saturday: 9pm – 2am
If Jamie is paid £10.50 an hour, how much will he make this week?

8. Rona works the following shifts
        Mon-Thurs: 11am – 7pm
        Saturday: 9am – 3pm
        Sunday: Midday – 3pm
If Rona earns £13 an hour, how much will she make this week?

9. Millie works the following shifts
        Tues – Thurs: 3pm – 9pm

Fri-Sun: 2pm – 10pm

If Millie is paid £9.50 an hour, how much will she earn this will?

10. Sara works the following shifts
      Mon – Thurs: 9am – 4pm
      Fri: 8am – 3pm
If Sara earns £8.75 an hour, how much will she make this week?

11. Will works the following shifts.
      Wed: 7am – 5pm
      Thursday: 8am – 5pm
      Friday: 8am – 7pm
      Saturday: 8am – 6pm
If Will earns £10.25 an hour, how much will he make this week?

12. Beth works the following shifts.
      Sat-Tuesday: 6pm-1am
      Friday: 7pm – 3am
If Beth is paid £10.50 an hour. How much will she make this week?

13. Zach works the following shifts.
      Mon: 7am – 4pm
      Thurs: 9am – 5pm
      Sat: 9am – 5pm
If Zach earns £9.50 an hour, how much will he make this week?

14. Victoria works the following shifts.
      Mon-Wed: 9.30am – 4.30pm
      Fri: 10am – 7pm
      Sat: 12.30pm – 4.30pm
If Victoria earns £8.70 an hour how much will she make this week?

# Chapter 2: Overtime

1. For each of the following wages, calculate how much each person would get paid per hour if they got *time and a half* and *double time*.

(a)  £9.00 an hour
(b)  £14.00 an hour
(c)  £11 an hour
(d)  £8.50 an hour
(e)  £9.40 an hour
(f)   £10.20 an hour
(g)  £14.30 an hour
(h)  £23.70 an hour


2.      Calculate how much money each of the following people will make on the day of their shift.

(a)     Joe earns £9.60 an hour. On Saturdays he is paid  hourly at **time and a half**, how much will he make on a Saturday if he works 10 hours?

(b)     Mary earns £7.50 an hour. If on a Saturday she is paid hourly at **double time**, how much will she make is she works 7 hours?

(c)     India earns £8.50 an hour. When she works past 4pm she is paid at **time and a half.** On Tuesday she works from 4pm to 9pm. How much will she be paid.

(d)     Sam normally earns £7.50 an hour. If he works at the weekend he is paid at **time and a half**. This weekend he works on Saturday for 4 hours and Sunday for 7 hours. How much will he make this weekend.

(e)     Rebecca normally earns £8.25 an hour. If she works past 5pm she is paid **double time**. This week she worked 5pm to 10pm twice. How much will Rebecca earn for working these hours this week?

(f)     Ross earns £9.75 an hour. If he works Sunday he is paid **triple time**. This week Ross works for 4 hours on Sunday, how much will he make?

(g)     Sophie earns £10.90 an hour. If she works at the weekend she earns is paid at 'time and a half'. This weekend she works 8 hours on Saturday and 7 hours on Sunday. How much will she earn this weekend working?

(h)     Jake is paid at **time and a half** when he works after 5pm during the week. If he works from 5pm to 8pm three times this week and is normally paid at £9.20 how much will he get paid this week for working those hours?


3.      Aminah earns £9 an hour. When she works at the weekend she is paid **double time**. She works the following shifts.
            Monday: 9am – 4pm
            Tuesday: 9am – 4pm
            Friday: 9am – 3pm

Saturday: Midday – 5pm
Calculate how much Aminah will be paid for these shifts.

4.    Kyle earns £8.40 an hour. He is paid **time and a half** when he works at the weekend. He works the following shifts.
        Mon: 4pm – 9pm
        Wed: 4pm – 10pm
        Thurs:4pm – 9pm
        Fri: 5pm – 9pm
        Sat: 3pm – 9pm
Calculate how much money Kyle will earn working this week.

5.    Adam earns £10.40 an hour. He is paid **time and a half** when he works after 5pm on any day of the week. He works the following hours
        Mon: 9am – 5pm
        Tues: Midday – 7pm
        Wed: Midday – 7pm
        Sun: 9am – 6pm
Calculate how much money Adam will earn this week.

6.    Aileen earns £9.80 an hour. She is paid **time and a half** when she works at the weekend. She works the following hours
        Mon: 2pm – 9pm
        Tues: 3pm – 9pm
        Wed-Thurs: 2pm – 8pm
        Sat-Sun: 1pm – 6pm
Calculate how much money Aileen will make this week.

7.    Henry earns £10.20 an hour. He is paid **triple time** when he works on Sundays. He works the following hours this week.
        Wed: 9am – 9pm
        Fri-Sun: Midday – 4pm
Calculate how much Henry will earn this week.

8.    Dana earns £12.50 an hour. She is paid **time and a half** at the weekend. She works the following shifts this week.
        Mon: 6am – 10am
        Thurs-Fri: 5am-10am
        Sat: 5am-10am

9.    Callum earns £10.50 an hour. He is paid at **time and a half** when he works during the week after 5pm and on Saturdays. He is also paid at **double time** if he works Sundays. Callum works the following shifts this week.

Mon- Tues: 10am – 7pm
Friday: Midday – 6pm
Sat: Midday – 4pm
Sun: Midday – 4pm
Calculate how much Callum will make this week.


10. Myriam is paid £8.50 an hour. She is paid **time and a half** when she works during the week after 5pm. If she works during the weekend then she is paid at **double time**.
Mon – Wed: 9am – 6pm
Fri: 11am – 8pm
Sat: 9am – 6pm
Sun: Midday – 3pm
Calculate how much Myriam is paid this week?


11. Stephen is paid £10.20 an hour. He is paid **time and a half** when he work after 5pm during the week or at the weekend until 5pm. He is also paid **double time** when he works at the weekend after 5pm. Stephen works the following shifts this week.
Mon – Tues: 9am – 5pm
Wed: Midday – 7pm
Sat: 9am – 7pm
Sun: 9am – 1pm
Calculate how much money Stephen will earn this week.


12. Kirsty is paid £9.80 an hour. She is paid **time and a half** when she works after 5pm during the week or at the weekend until 5pm. She is also paid **triple time** when she works at the weekend after 5pm. Kirsty works the following shifts this week.
Tues- Thurs: 9am – 3pm
Fri: 1pm – 9pm
Sun: 9am – 7pm
Calculate how much Kirsty will get paid this week.

# Chapter 3: Commission

1. Harris gets paid 5% on commission on his sales. If he makes £1800 worth of sales then how much commission will he get?

2. Anna earns 12.5% commission on any sales she makes, if her total sales come to £3000, how much commission will she make?

3. Tom earns 35% commission on his sales. If his total sales come to £1200, how much commission will he make.

4. Idris sells TVs. He receives commission of 3% from his total sales. Idris sells TVs for the following prices;
   £900, £750, £1250, £800 and £2200.
   Calculate what Idris's total commission will be from the sale of all these TVs.

5. Beth works in a jewellery store. She receive commission of 5% on any items she sells that are worth more than £100. During this week she sells items at the following prices.
   £140, £250,  £80, £120, £340
   Calculate Beth's total commission for this week.

6. Abigail earns £8% commission on any sales she makes over £200. This week she makes the following sales.
   £350, £250, £300, £420, £140
   Calculate Abigail's total Commission for this week.

7. Jake sells cars. Jake has a quota of £10000. Jake is then paid commission of 6% for his total sales over £10000. This week Jake sold £12,000 worth of cars. Calculate the amount of commission that Jake has made this week.

8. Liam is a salesman. For all of his sales over £1000 he receives a commission fee of 7.5%. Liam made the following sales for each day this week.
   Mon:   £240
   Tues:  £300
   Wed:   £370
   Thurs: £510
   Fri:    £340
   Calculate Liam's total commission for this week.

9. Sofia is a saleswoman. When Sofia's sales total more than £2000 she receives a commission fee of 12% of the sales over £2000. Sofia's sales are the following
   £800, £290, £400, £900, £650, £350
   Calculate the commission earned by Sofia.

10. Carly works for a mobile phone company. She works 30 hours a week and is paid £10.70 an hour. She also receives commission 8% on her total sales.

Carly's sales this week come to a total of £800. Calculate Carly's total income this week?

11.  Elena works for as an estate agent. She is paid £15.50 an hour and is paid 0.5% commission on any houses she sells. This week she works 20 hours and sells 2 properties at a total cost of £190,000. Calculate how much Elena will earn this week.

12.  Michael is a sofa salesman. He is paid a wage of £8.20 an hour. He also receives 5% commission on his sales. If Michael works 40 hours this week and sells £5000 worth of sofas. Calculate how much money Michael will make this week.

13.  Dale is a salesman. He is paid £9.50 an hour. He also receives 12% commission on his total sales over £10,000. This month he works 100 hours and his total sales comes to £14,500. Calculate how much money Dale will earn this month.

14.  Claire works for a gym. For every new client who Claire signs up, she receives £2.80. This week Claire signs up 12 new clients. Claire is also paid an hourly wage of £7.50 an hour. This week he works 35 hours. How much money will Claire make this week.

15.  Daniel works for an engineering company shipping parts out to international markets. He is paid 15% on his total sales after £10,000. Daniel is paid £16 an hour and works 40 hours this week and his total sales are £17,500. How much will Daniel make this week?

16.  Fred works in a restaurant supply chain. His is paid an hourly salary of £10.40 an hour. He also is paid 6% commission on all of his sales. The following shows his shift schedule and daily sales.
        Mon: 9am – 5pm,  £120
        Tues: 9am – 5pm , £80
        Thurs: 9am – 4pm, £75
        Sat: Midday – 9pm, £245
Calculate how much money Fred will make this week.

17.  Angus is paid £11.80 an hour and is paid 5% on his total commission for the week. Angus works the following shifts and is his sales each day are shown.
        Mon: 4pm – 10pm,  £200
        Thurs: 2pm – 10pm, £340
        Sat:  1pm – 6pm, £280
Calculate how much Angus will make this week.

18.  James is paid £12.50 an hour and is paid 10% commission on his sales throughout the week. He is also paid **time and a half** at the weekend. Below are James's shifts for this week along with his sale.

        Mon: 9am – 3pm, £140

Tues: 9am – 4pm, £80
Thurs: 9am – 5pm, £120
Sat: 9am – 3pm, £100
Calculate how much James will earn this week.

19. Grace is paid £13.40 an hour and is paid 5% commission on her sales throughout the week. She is also paid at **time and a half** after 5pm each day. This is Grace's shifts this week along with her sales that day.
Tues: 9am – 6pm, £200
Wed: 9am – 6pm, £300
Thurs: Midday – 8pm, £400
Friday: 9am – 6pm, £200
Calculate how much Grace will each this week.

20. Owen is paid £9.20 an hour. He also gets paid 7% for commission on his total sales over £2000. Owen is also paid **double time** when he works on Sundays. This is Owen's shifts this week along with his sales for each day.
Mon: 9am – 4pm, £490
Tues: 8am – 6pm, £550
Wed: 9am – 6pm, £500
Thurs: 9am – 4pm, £600
Sat:   9am – 3pm, £400
Sun:   9am – 2pm, £310
Calculate how much Owen is going to make this week.

## Chapter 4: Deductions

1. For each of the following people calculate their *total deductions*.
(a) Income Tax – £38.60, Superannuation – £24.30, National Insurance - £41.10
(b) Income Tax – £63.15, Superannuation – £49.95, National Insurance - £52.40
(c) Income Tax – £54.20, Superannuation – £43.20, National Insurance - £28.66

2. Calculate the **take home pay** for the following people.

(a)     Holly earns £450 a week. Income Tax is 15% of her wage, she also pays £21.40 for superannuation and her national insurance payment per week is £18.55.

(b)     Sean earns £1560 a month. Income Tax is 20% of his wage. He also pays £80.40 for superannuation and £56.20 for national insurance.

(c)     Ralph earns £510 a week. Income Tax is 15% of his wage. Superannuation is £75.50 and his national insurance contribution is 7% of his wage.

(d)     Ali warns £2340 a month. Income tax is charged at 12%. Superannuation is 4.5% of his wage and his national insurance contribution is 7% of his wage.

3.     Natalie is paid £15.20 an hour. This week she works 40 hours. Her income tax is £23.20, superannuation is £41.50 and her national insurance contribution is £36.40. Calculate her **take home pay**.

4.     Nicky is paid £12.60 an hour. This week she works 50 hours. Her income tax is £34.50. She also pays £56 for superannuation and her national insurance contribution is £41.30. Calculate her **take home pay**.

5.     Gavin is paid £38,600 per year.
He receives £12,000 of this tax free. After this income Tax is paid at 12%. He also pays £1900 off his salary for superannuation and £1760 for his national insurance payments. Calculate his **yearly take home pay**.

6.     **(Calculator)** Lucy is paid £43,500 per year.
She receives £12,000 of this tax free. After this income tax is paid at 12%. She also pay £2250 for superannuation and her national insurance contributions are £2470. Calculate her **monthly** take home pay.

7.     **(Calculator)** Kelsey is paid £29,000 per year.

She receives £15,000 of this tax free. After this income is paid at 15%. She also pays £1290 for superannuation and her national insurance contributions are £1560. Calculate her **monthly** take home pay.

8. Morgan is paid £7.90 an hour. She works 200 hours this month. Her income tax is 15%. She also pays £156.50 for superannuation and £98.20 for national insurance. Calculate her take home pay this month.

9. Bruce is paid £9.50 an hour. He works 35 hours this week. His income tax is 12% of his total wage. He also pays £52.40 in superannuation and £35.25 in national insurance contributions. Calculate Bruce's weekly take home pay.

10. Rachel is paid £12.40 an hour. She works 45 hours this week. Her income tax is 15% of her total wage. She also pays 62.80 in superannuation and £59.10 in national insurance contributions. Calculate Rachel's take home pay this week.

11. Katie is paid £14.50 an hour. She works 30 hours this week. She is also paid 14% commission on the £950 of sales this month.
(a) Calculate Katie's **gross pay**.

Katie also pays 10% of her gross pay for income tax. She pays £37.10 for superannuation and £25.60 for national insurance.
(b) What is Katie's take home pay?

12. Scott is paid £11.80 an hour, except at the weekends in which she is paid **time and a half**.
   Mon: 9am – 5pm
   Tues: 9am – 3pm
   Wed-Thurs: 9am – 5pm
   Sat: 10am – 4pm
(a) Calculate Scott's gross pay.

Scott pays 10% of his gross pay for Income Tax. £21.95 for superannuation and £33.50 for national insurance.
(b) Calculate Scott's take home pay.

13. Cillian is paid £8.40 per hour. He is also paid 5% commission on all of his sales. The following shows the hours each works each day followed by his total sales for the day.
   Tues: 8am – 4pm,  £70
   Wed: 9am – 4pm,  £90
   Thurs: 9am – 6pm,  £140

Sat: 9am – 5pm, £230

Sun: 9am – 2pm, £110

(a) Calculate Cillian's gross pay for the week.

Cillian also pays £41.20 for income tax, £34.35 for superannuation and £35.15 for national insurance.

(b) Calculate Cillian's take home pay.

14. Chris is paid £12.30 an hour. He works for 45 hours this week. Chris is also paid on commission of 11% on all his total sales over £3000. This week Chris makes the following sales; £900, £1300, £450, £800, £1500.

(a) Calculate Chris's gross pay this week?

Chris pays 15% of his gross pay for income tax. £66.70 is for superannuation and £51.20 is for national insurance.

(b) Calculate Chris's take home pay?

15. Maggie is paid £15.30 an hour. She is also paid **time and a half** when she works after 5pm during the week and gets paid **double time** at the weekend. She works the following shifts.

Mon: 9am – 5pm

Tues: 4pm – 10pm

Wed: 9am – 3pm

Thurs: Midday – 8pm

Sun: 9am – 1pm

(a) Calculate Maggie's gross pay this week.

Income Tax is deducted at 10% of her total wage. She also pays £51.20 as superannuation and £76.15 as national insurance.

(b) Calculate Maggie's take home pay.

# Chapter 5: National Insurance Payments

**All the questions below should be done with a calculator.**

1.   Alan earns £22000 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £9000 | 0% |
| From £9000 to £38000 | 12% |
| Over £38000 | 2% |

   Calculate Alan's annual national insurance payment.

2.   Maddie earns £34000 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £9000 | 0% |
| From £9000 to £38000 | 12% |
| Over £38000 | 2% |

   Calculate Maddie's annual national insurance payment.

3.   Isa earns £31,950 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £8655 | 0% |
| From £8655 to £42,400 | 12% |
| Over £42,400 | 2% |

   Calculate Isa's annual national insurance payment.

4.   India earns £39,220 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £8655 | 0% |
| From £8655 to £42,400 | 12% |
| Over £42,400 | 2% |

Calculate India's annual national insurance payment.

5.      Kenny earns £47,550 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
| --- | --- |
| Up to £9000 | 0% |
| From £9000 to £38000 | 12% |
| Over £38000 | 2% |

Calculate Kenny's annual national insurance payment.

6.      Sally earns £58,750 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
| --- | --- |
| Up to £9000 | 0% |
| From £9000 to £38000 | 12% |
| Over £38000 | 2% |

Calculate Sally's annual national insurance payment.

7.      Sofia earns £51,625 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
| --- | --- |
| Up to £9000 | 0% |
| From £9000 to £38000 | 12% |
| Over £38000 | 2% |

Calculate Sofia's annual national insurance payment.

8.      Erin earns £49,700 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
| --- | --- |
| Up to £8655 | 0% |
| From £8655 to £42,400 | 12% |
| Over £42,400 | 2% |

Calculate Erin's annual national insurance payment.

9. David earns £81,500 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £8655 | 0% |
| From £8655 to £42,400 | 12% |
| Over £42,400 | 2% |

Calculate David's annual national insurance payment.

10. Julie earns £65,980 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £7855 | 0% |
| From £7855 to £38,496 | 12% |
| Over £38,496 | 2% |

Calculate Julie's annual national insurance payment.

11. Graham earns £35,750 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £7855 | 0% |
| From £7855 to £38,496 | 12% |
| Over £38,496 | 2% |

a) Calculate Graham's annual national insurance payment.

Graham also pays 15% of his wages for his income tax. He also pays £1940 for superannuation.

b) Calculate Graham's annual **take home pay**.

12. Jacqui earns £63,190 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £9650 | 0% |
| From £9650 to £41,450 | 12% |
| Over £41,450 | 2% |

a) Calculate Jacqui's annual national insurance payment.

Annually Jacqui pays £4,518 for her income tax. She also pays £2,867 for superannuation. She is paid in 12 even instalments.

b) Calculate Jacqui's **monthly take home pay**.


13. Lee earns £32,300 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £9650 | 0% |
| From £9650 to £41,450 | 12% |
| Over £41,450 | 2% |

a) Calculate Lee's annual national insurance payments

For income tax Lee must pay 12% of his wages. He also pays £2140 for superannuation.

b) Calculate Lee's **annual take home pay**.


14. Katherine earns £53,600 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £9650 | 0% |
| From £9650 to £39,450 | 12% |
| Over £39,450 | 2% |

a) Calculate Katherine's annual national insurance payments.

Katherine pays 17% of her wages for income tax. She also pays £3,510 for superannuation.

b) Calculate Katherine's **annual take home pay**.

15. Jordan earns £44,750 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
|---|---|
| Up to £8850 | 0% |
| From £8850 to £39,450 | 12% |
| Over £39,450 | 2% |

a) Calculate Jordan's national insurance contributions

Jordan also pays £3512 a year for income tax and £2870 for superannuation. Jordan is also paid in 12 equal monthly instalments.

b) Calculate Jordan's **monthly** take home pay.

## Chapter 6: Saving Wages

1. Lisa is paid £8.50 an hour. She works 30 hours a week.

   a) Calculate Lisa's gross pay.

   Lisa also pays £75 in her weekly **deductions**. She then saves 10% of her wages a week.

   b) How much money will she save in 7 weeks?

2. James is paid £10.20 an hour. This week he works 40 hours.

   a) Calculate James' gross pay.

   James also pays £133 for his weekly **deductions**. He then saves 20% of his wages a week.

   b) How much will James have saved in 6 weeks?

3. Robert is paid £9.60 an hour. He works 30 hours this week.

   a) Calculate Robert's gross pay.

   Robert pays £51.30 for income tax, £34.80 for superannuation and £22.40 for national insurance.

   b) Calculate Robert's take home pay.

   Robert saves 10% of his wages a week.

   c) Calculate how much Robert will save in 4 weeks.

4. Jessica is paid £11.50. This week she works 30 hours.

   a) Calculate Jessica's gross pay.

   Jessica pays 20% of her wages for income tax. She also pays £46.20 for national insurance and £27.80 for superannuation.

   b) Calculate Jessica's take home pay.

Jessica saves 15% of her wages a week. She is trying to save up for a bicycle worth £420.

c) If she saves for 11 weeks will she have enough money?

5.    Mr Jones is paid £1800 a month.

$\frac{1}{5}$ of his wages are deducted from Income Tax and National Insurance

He also pays £240 in Superannuation.

(a) Calculate Mr Jones' take home pay every month.

Mr Jones plans to save £300 every month.

(b) What is £300 as a percentage of his **take home pay**.

Mr Jones is saving up for a holiday. The holiday costs £1455 but he also wants to bring some extra money to spend while he is there.

(c) If Mr Jones saves £300 a month for 6 months, how much extra will he have to spend while he is on holiday?

6.    Ellie is paid £9.80. This week she works 40 hours.

a) Calculate Ellie's gross pay.

Ellie pays 10% of this for income tax. She also pays £27.40 for national insurance and £31.40 for superannuation.

b) Calculate Ellie's take home pay.

Ellie then saves 30% of her wages every week. Ellie is trying to buy a new Laptop for £790.

c) Will Ellie have enough money in 9 weeks to buy the laptop?

7.    John is paid £13.50. This week he works 50 hours.

a) Calculate John's gross pay

John pays 20% of this wage for Income Tax. £88.50 is paid for superannuation and national insurance.

b) Calculate John's take home pay

c) If John saves half of his take home pay a week. How much will he have in 5 weeks?

John needs to save up £1200 for a deposit on a holiday.
d) After 5 weeks how many more weeks will John need to save to have enough for his deposit?

8.    Gemma works as a waitress. She earns £9.50 an hour. Gemma works 40 hours this week and also earns £112 in tips.

a) Calculate Gemma's gross pay

Gemma pays 10% of all her income to income tax. She also pays £45.40 for superannuation and £28.40 for national insurance.

b) Calculate Gemma's take home pay

Gemma's expenses for the week are as follow

Rent - £75
Bills - £15
Food - £29

c) Gemma plans to save £100 of whatever she has leftover, what is this as a percentage of the amount she has left after her expenses are paid

9.    Sam is paid £9 an hour. This week he works 45 hours.

a) Calculate Sam's gross pay.

Sam pays 15% of this for income tax. £28.90 is paid for superannuation and 38.35 is paid for national insurance.

b) Calculate Sam's take home pay.

The table below shows Sam's weekly expenditure

|               | Income | Expenditure |
|---------------|--------|-------------|
| Take home pay |        |             |
| Rent          |        | £90         |
| Gas           |        | £12         |
| Electricity   |        | £11         |

| Food | | £40 |
|------|--|-----|

c) Calculate how much Sam will have leftover.

Sam saves 10% of his wage.

d) How much will he have saved in 7 weeks?

10. (Calculator Question) Miss Baker is a Car Salesperson. She is paid £15.20 an hour. This week she works 35 hours. She is also paid commission of 0.5% on all the cars she sells. This week she sells £72,000 worth of cars.

a) Calculate her gross pay for the week.

- $\frac{4}{25}$ of her gross pay is for income tax.

- She also pays 5% of her gross pay for superannuation.

- 7.5% of her gross pay is for national insurance.

b) Calculate Miss Baker's take home pay

Miss Baker then decides to pay for a new car herself. She receives an employee discount on monthly payments of the car. The discount is 12%. The car Miss Baker wishes to get is £280 a month before discount.

c) After the discount is calculated what percentage of Miss Baker's take home pay would she be spending on her car?

11. (Calculator question) Aileen is a teacher. She earns £38,400 a year. Given she is paid in even monthly instalments.

a) Calculate her monthly gross home pay.

Aileen pays 15% of her wages for income tax. She also pays £219 for superannuation and £101 for national

b) Calculate Aileen's take home pay.

Aileen creates a spreadsheet for how she spends the rest of her money and produces a pie chart from the results.
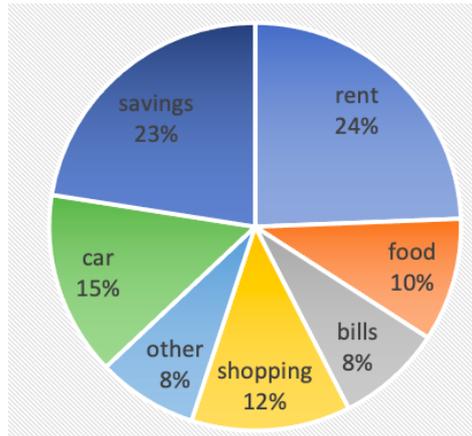
c) Calculate how much Aileen saves every month.

Aileen is planning a month long holiday to America in the summer. The expenses are as follows,

Plane Tickets - £1200
Hotels - £520
Travel - £215

d) How many months will Aileen need to save before she can afford her holiday?

12. (Calculator Question) Mona is a Doctor. She is paid £61,500 a year. National insurance is calculated on a person's salary before deductions such as pension contributions.

| National Insurance Rates | |
| --- | --- |
| Up to £8850 | 0% |
| From £8850 to £39,450 | 12% |
| Over £39,450 | 2% |

a) Calculate Mona's national insurance contributions

Mona's annual income tax is £5180 and her national insurance contributions is £3720.

b) Given that she is paid in 12 equal instalments, calculate Mona's **monthly** take home pay.

Mona pays the following throughout the month.

| | Income | Expenditure |
| --- | --- | --- |
| Take home pay | | |
| Rent | | £410 |
| Gas | | £78 |

| | | |
|---|---|---|
| Electricity | | £65 |
| Food | | £400 |
| Credit Cards | | £200 |

c) Calculate how much Mona has left over after this.

Mona then saves 5% of this per month. She is trying to buy a sofa worth £1200.

d) Will she have enough after 8 months?

# Chapter 7: Mixed Wages Questions

10 Exam Style Questions on wages questions. Similar that that which has appeared so far in applications papers. Remember there has only been 2 years of papers. All questions are non calculator unless otherwise stated.

1.     Greg works as a personal trainer. He earns £9.40 an hour. He works 30 hours this week. He also pays £32.40 for income tax, £16.85 for superannuation and £12.15 for national insurance.

a) Calculate Greg's take home pay.

Greg's weekly expenses are as follows.

Rent - £65
Bills - £38
Travel - £12
Other - £45

b) Calculate how much money Greg will have leftover after this.

Greg is saving for a holiday in 8 weeks that costs £450

c) If he saves what he has left for the 8 weeks will Greg be able to afford the holiday?

2.     **(Calculator)** Lea works as a builder.

Her annual salary is £24,820.

National insurance is calculated on a person's salary before deductions.

| National Insurance Rates | |
| --- | --- |
| Up to £8850 | 0% |
| From £8850 to £39,450 | 12% |
| Over £39,450 | 2% |

a) Calculate Lea's annual national insurance payment.

Lea pays 6.5% of her annual salary into her pension and £1042.52 into income tax.

b) Calculate Lea's annual net pay.

3. Katie works as a café manager.
The table show's Katie's shifts this week.

|  | Start Time | End Time |
|---|---|---|
| **Monday** | 09:00 | 18:00 |
| **Wednesday** | 09:00 | 18:00 |
| **Friday** | 11:00 | 18:00 |
| **Saturday** | 10:00 | 16:00 |

Katie's basic hourly rate is £14.50 an hour.

Kate is paid time and a half when she works at the weekend.

Calculate Katie's take home pay for the week.

4. (Calculator) Colin is an optician. Colin is paid £17 an hour for his basic salary. This week Colin works 40 hours.

a) Calculate Colin's gross pay for the week.

Colin pays 10% of his salary for income tax. He also pays £31.43 for superannuation and £46.57 for national insurance.

b) Calculate Colin's take home pay.

Colin records his income and outgoings on a table.

|  | Income | Outgoings |
|---|---|---|
| Take home pay |  |  |
| Rent |  | £70 |
| Food |  | £25 |
| Bills |  | £18 |
| Other |  | £36 |

c) Calculate how much Colin has leftover.

Colin then puts 50% of this into savings.

d) Calculate how much Colin will have saved up in 15 weeks

5. Frank works in a deli

This week Franks works the following hours.

|  | Start Time | End Time |
|---|---|---|
| Monday | 12:00 | 19:00 |
| Wednesday | 12:00 | 19:00 |
| Thursday | 14:00 | 20:00 |
| Friday | 12:00 | 14:00 |
| Saturday | 09:00 | 18:00 |

Frank is paid a basic rate of £7.80 an hour. He is paid time and a half when he works at the weekend and on the weekdays after 5pm.

Calculate Frank's take home pay.

6. **(Calculator)** Amy works as sales person.

She paid a basic annual salary of 28,800 in 12 even monthly instalments.

Amy is also paid 3.5% commission on her sales over £5000.

In the month of May Amy's total sales were £10000.

a) Calculate Amy's gross pay for the month of May.

In her May payslip she has the following deductions.
- Income Tax      £312.80
- National Insurance    £215.60
- Pension          £195.40

b) Calculate Amy's take home pay for the month of May.

7. Gary works the night shift

- He works from 2200 to 0900 the next day.
- His basic rate of pay is £12.50 per hour.
- Gary is paid time and a half between 0000 and 0600
- Gary works this shift 4 times this week.

Calculate Gary's weekly gross pay.

8.    Stuart works for a bathroom fitting company.

He is paid a basic monthly salary of £1200

This month Stuart receives a 7% bonus.

a) Calculate Stuart's gross income

Stuart's monthly deductions are 14% of his gross income.

b) Calculate Stuart's take home pay

Stuart pays the following bills this month.

Rent              £260
Food              £140
Gas\Electricity   £100

c) Calculate how much Stuart spends on bills as a percentage of his **take home pay**. Give your answer to 1 decimal place.


9.    **(Calculator)** Michael works as a Lawyer.

His annual salary is £58,900.

National insurance is calculated on a person's salary before deductions.

| National Insurance Rates | |
| --- | --- |
| Up to £8850 | 0% |
| From £8850 to £39,450 | 12% |
| Over £39,450 | 2% |

a) Calculate Michael's annual national insurance payment.

Michael pays 11.5% of his annual salary into his pension and £2042.52 into income tax.

b) Calculate Michael's annual net pay.


10.    Mhairi works as an engineer. She receives a basic monthly salary of £1950

- Mhairi's total overtime for the month of February earns her an extra £240

- Mhairi pays 15% of her **total wages** (including overtime) for national insurance
- Mhairi pays £385 in total for her superannuation and national insurance

a) Calculate her take home pay.

Mhairi uses the following table to balance her finances.

|  | Income | Outgoings |
|---|---|---|
| Take home pay |  |  |
| Rent |  | £550 |
| Food |  | £235 |
| Bills |  | £198 |
| Entertainment |  | £247 |

Once Mhairi has calculated her outgoings Mhairi wants to spend 30% of what is left on her car payments.

b) Calculate how much Mhairi wants to spend on her car payments.

# Chapter 8: Foreign Exchange (Basic)

For the following questions use these exchange rates unless otherwise stated.
A calculator should be used in all the following questions.

| Currency | Euro | Dollar (US) | Zloty (Poland) | Yen (Japan) | Peso (Mexico) | Yuan (China) | Australian Dollar |
|----------|------|-------------|----------------|-------------|---------------|--------------|-------------------|
| £1 | 1.14 | 1.28 | 4.91 | 140.51 | 24.36 | 8.85 | 1.90 |

1. Convert the following currencies.

   (a) £120 into Euros
   (b) £450 into Peso
   (c) £800 into Yen
   (d) £88 into Zloty
   (e) £1200 into Australian Dollars
   (f) Michael got 600 Euros for £500, is his deal better or worse than the one above?

2. The following questions should be attempted **without a calculator**.

   (a) Take 1 pound = 5 Zloty, convert £280 into Zloty.
   (b) Take 1 pound = 150 Yen. Convert £25 into Yen.
   (c) Take 1 pound = 1.10 euros. Convert £90 into Euros.

3. The following currencies need to be convert back into pound.

   (a) 300 Dollars.
   (b) 800 Peso.
   (c) 30,000 Yen.
   (d) 5000 Yuan.
   (e) 288 Australian Dollars.
   (f) 1700 Euros.

4. The following questions should be attempted **without a calculator**.

   (a) Take 1 pound = 9 Yuan. Convert 1143 Yuan into pounds.
   (b) Take 1 pound = 5 Zloty. Convert 485 Zloty into pounds.

5. The following require two conversions, into pounds and then into the desired currency.

(a) Convert 450 Dollars into Euros.
(b) Convert 25000 Yen into Peso.
(c) Convert 200 Zloty into Australian Dollars.
(d) Convert 8000 Peso into Euros.

6.     For the following you need to look at the conversions to work out what the exchange rate is.

(a) Alan got 300 euros for £250. What exchange rate did Alan get?
(b) Sophie received 5000 Peso for £180. What exchange rate did Sophie get?
(c) Elle received 10000 Yen for £64. What exchange rate did she get?

7.     Bethany goes on holiday to France for 4 days. She decides to convert £500 for spending money. Every day she spends 60 euros.

(a) How many euros will she have left at the end of the trip?
(b) When she converts this back to pounds how much will she have left?

8.     Neil buys a new pair of shoes while he is visiting family in America. The shoes cost 130 dollars.

(a) How much would this be in pounds?
(b) When he gets him to the UK and see them for £115. How much did he save buying them in America?

9.     Henry is travelling to Mexico. He brings 5000 pesos with him. How much is this in pounds to the nearest whole pound?

10.    Arsenal have just bought a new centre forward for 58million Euro. How much is this in pounds to the nearest million.

11.    The following is the cost of a jacket in 4 different countries
UK = £88
Spain = 110 Euros
America = 140 dollars
Japan = 12500 Yen
Which country was the cheapest?

12. Ben is offered a job teaching in China where he will be paid 450 000 Yuan a year. How much would this be in pounds?

13. Jack goes on holiday to Holland. He has £1200 which he converts into Euros. He spends 850 euros while he is there. How much in pounds does he have left?

14. Amii goes on holiday to America with £700. If she comes home with £280 how much did she spend in dollars?

# Chapter 9: Foreign Exchange Exam Questions

Only use a calculator when stated.

1.  Angelo is travelling to Australia.
    He changes £2000 into Australian Dollars.

    | Currency Exchange | |
    | --- | --- |
    | Pounds Sterling | Currencies |
    | 1 | 1.75 Australian Dollars |
    | 1 | 4 Brazilian Real |

    a) How many Australian Dollars will he receive?

    He then spends 375 Australian Dollars a day for 5 days.

    b) How much Australian Dollars will Angelo have left.

2.  Becky is travelling to France.
    She changes £900 into Euros.

    | Currency Exchange | |
    | --- | --- |
    | Pounds Sterling | Currencies |
    | 1 | 1.45 Euros |
    | 1 | 1.63 US Dollars |

    a) How many Euros will she receive?

    She then spends 235 euros a day for 4 days.

    b) How much Euros will she have left?

3.  Sasha is travelling to Hungary.
    She changes £1500 into Forint.

    | Currency Exchange | |
    | --- | --- |
    | Pounds Sterling | Currencies |
    | 1 | 400 Forint |

| | |
|---|---|
| 1 | 1.5 Euros |

a) How many Forint will she receive?

She spends 80,000 Forint for 4 days. She then converts the rest of her money into Euros.

b) How much Euros will she have?


4.     James is travelling to Poland.
He changes £2800 into Zloty.

| Currency Exchange | |
|---|---|
| Pounds Sterling | Currencies |
| 1 | 5 Zloty |
| 1 | 9 Danish Krone |

a) How many Zloty will he receive?

He spends 835 Zloty for 7 days. He then converts the rest of his money into Danish Krone.

He then spend 2400 Danish Krone for 3 days every day he is in Denmark and then converts his money back into pounds

b) How much pounds will James be left with?


5.     Patrick is travelling to Argentina.
He changes 3000 into Argentine Peso.

| Currency Exchange | |
|---|---|
| Pounds Sterling | Currencies |
| 1 | 6 Argentine Peso |
| 1 | 5 Brazilian Real |

a) How many Argentine Peso will he receive?

He spends 1120 Argentine Peso for 5 days. He then converts the rest of his money into Brazilian Real.

He then spend 1150 Brazilian Real for 5 days every day he is in Brazil and then converts his money back into pounds

b) How much pounds will Patrick be left with?


6.   Jane is travelling to Norway.
     She changes £2200 in Norwegian Krone.

| Currency Exchange | |
| --- | --- |
| Pounds Sterling | Currencies |
| 1 | 8 Norwegian Krone |
| 1 | 1.5 Euros |

a) How many Krone will she receive?

She spends 1400 Krone for 4 days. She then converts the rest of her money into Euros.

b) How much Euros will she have?


7.   **(Calculator)** Clare is travelling to Japan.
     She changes £3500 in Japanese Yen.

| Currency Exchange | |
| --- | --- |
| Pounds Sterling | Currencies |
| 1 | 120 Japanese Yen |
| 1 | 1.8 Australian Dollars |

a) How many Japanese Yen will she receive?

She then spends 33,000 Yen a day for 5 days.
After this she converts the rest of her money into Australian Dollars.

b) How much Australian Dollars will she receive?


8.   **(Calculator)** Oscar is travelling to Turkey for a 6 day holiday.
     He changes £2600 into Turkish Lira.

| Currency Exchange | |
|---|---|
| Pounds Sterling | Currencies |
| 1 | 9.7 Turkish Lira |
| 1 | 1.3 Swiss Franc |

a) How many Turkish Lira will he receive?

He spends 1400 Turkish Lira every day and converts the rest of his money into Swiss Francs

b) How much Swiss Francs will he receive?

9. **(Calculator)** Grant is looking at buying a new car from Germany.
   He has two choices

   - Grant can pay for the car from a supplier who will charge £17,500 plus 4.5% commission.
   - Or Grant can buy it directly from the factory in Germany. The cost is 21,000 Euros plus 350 euros to ship the car over.

   Using the exchange rate of £1 = 1.35 Euros. Which option should Grant choose?

10. **(Calculator)** Rona is looking at buying a new laptop from a Japanese company. She has three options.

    - To buy from a UK store for £799.99
    - Buy it from a European supplier, it will cost 900 Euros, plus 60 euros to ship the laptop.
    - To buy the laptop straight from the company for 90,000 Yen.

    Rona's bank will issue a 5% fee on any purchases from foreign countries.
    Using the following exchange rates
    £1 = 1.4 Euros
    £1 = 125 Yen

    Which option should Rona choose?

11. **(Calculator)** Graham is looking at installing a new kitchen. He has two choices.
    - To buy from a UK supplier for £2575
    - To buy from a European Supplier for 3300 Euros plus a charge of 3.5% for an international payment.

Using exchange rate of £1 = 1.4 euros
Which option should Graham use?

12. **(Calculator)** A group of 5 Maths teachers in the UK form a band which are going to tour across Europe. An event's organiser in Germany is asking how much it would cost for them to play at a local festival, stating they will also cover the bands expenses for travel and accommodation.

   - The bands standard fee is £1000
   - A return ticket for flights is £140 per person
   - To ship the instruments to and from the UK is an extra £100
   - A suite in a hotel for 5 people is 550 euros

   Using the exchange rate £1 = 1.31 euros. The event organiser offers 2800 euros, would this be enough to cover all the costs?

13. (Calculator) Alan is looking at the following website, which are all for the same hotel in Zurich in Switzerland

|  | The UKs Best Europe Deals | Le Hotels | Hotel de pas cher |
|---|---|---|---|
| Single Room | £96 | 112 euros | 116 Swiss Francs |
| Double Room | £116 | 148 euros | 153 Swiss Francs |
| Triple Room | £149 | 171 euros | 180 Swiss Francs |

Alan and his wife are looking for a double room. Using the following exchange rates

£1 = 1.25 euros
1 euro = 1.1 Swiss Franc

Which website offers the cheapest deal that Alan can get?

14. The Smiths take £3600 on a cruise
They exchange 25% of their money into Euros for a day trip.
The exchange rate is £1 = 1.25 euros.
How many euros will they receive?

15. (Calculator) The Hendries go on holiday and take £4200 to the airport
They convert 65% of this into Euros at the airport with the exchange rate of

£1 = 1.33 euros
If they spend 2039 euros.
How much euros will they have left at the end of this?

16.    (Calculator) The Addisons are going on holiday with £2800
They convert 55% of their money into American dollars
The exchange rate is £1 = $1.45
If they spend 1365 dollars how much American Dollars will they have left?

17.    (Calculator) The graph shows how many Euros can be bought for £1 Sterling
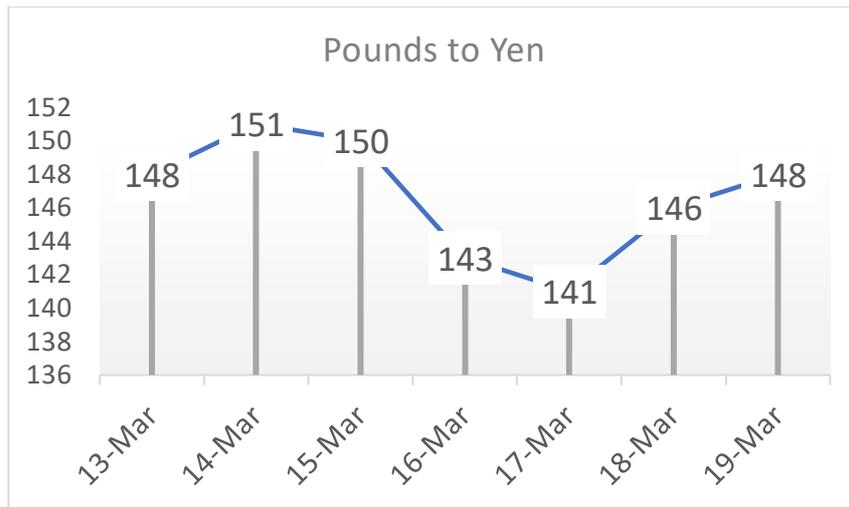


Chart Title
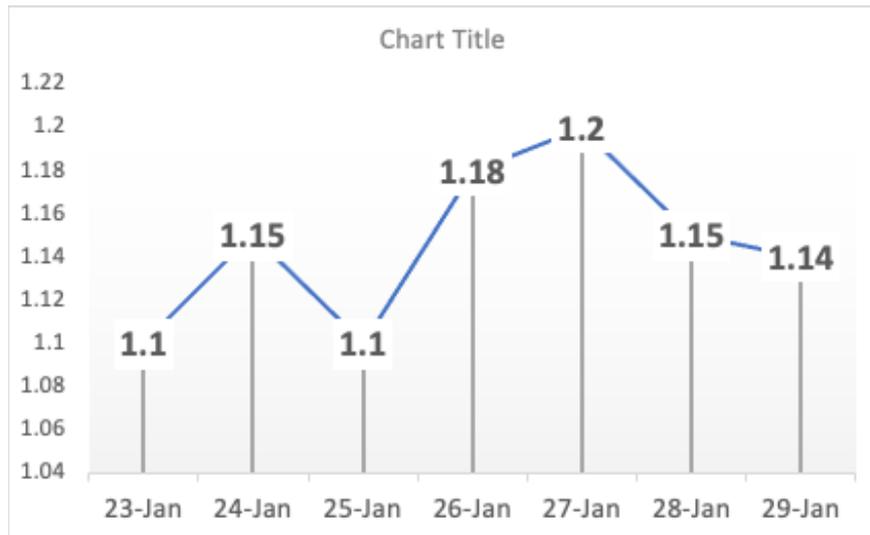
Ali converts 340 pounds into euros on the 24th of January.

a) How many Euros will he receive?

Ali later in the week exchanges 190 pounds into 228 Euros.

b) Which day did Ali make this exchange?

18.    (Calculator) The graph shows how many Japanese Yen can be bought £1

Pounds to Yen

If Talliah converts £590 into Yen on the 13<sup>th</sup> of March
a) how much Yen will she get

b) How much more would Talliah have receive is she had converted the money a day later?

Talliah converts £1400 into 204400 Yen

c) On which day did Talliah convert this money.

# Chapter 10: Shares

1. Harriot buys 600 shares for £500
   After a few years she sells them for a profit at £1.50 for each one.
   How much profit will Harriot make?

2. Leanne buys 300 shares for £450.
   She sells them all and makes a total profit of £90.
   How much did Leanne sell each share for?

3. Jacob buys 400 shares for £620
   After a few months Jacob decides to sell them for a loss at 1.20 each.
   How much of a loss did Jacob make on the stocks

4. Ryan buys 200 shares for £940
   A few months later Ryan decides to sell the shares for £5.15 per share
   When he does this he also needs to pay a selling fee that is 3% of the selling price.
   How much profit did Ryan make selling the shares?

5. Tina buys 300 shares for £630
   She sells them at a loss for £1.80 each.
   She also must pay a sellers fee of 4% of the selling price
   Calculate how much Tina will lose selling these shares

6. William buys 500 shares for £860
   He sells for a profit at £2.13 each.
   He must pay a sellers fee for 2.5% of the selling price
   Calculate the profit that William will make selling the shares.

7. Angelica buys 400 shares for £550
   She sells them all for a loss at £0.80 each.
   She also must pay a sellers fee of 3%.
   Calculate how much of a loss Angelica has made on the shares.

8. Mandy buys 600 shares for £678
   She then sells the for a profit of £1.45 each.
   She must pay a sellers fee of 2.5% of the selling price.
   Calculate how much of a profit Mandy has made on the shares.

9. John buys 200 shares for £450
   After a few months he sells 50% of his shares for £2.40 each.
   After that a few more months later John sells the rest of his shares for £1.65 each.
   How much money did John lose on his shares?

10. Helen buys 3200 shares for £2500
    She sells 45% of them for £1.30 a share
    She sells the rest for £1.56 each.

How much profit did she make on the shares?

11.    Christina buys 2400 shares for £2800
    She sells 40% of them for £0.45 per share.
    She then sells the rest of them for £0.85 each.
    How much of a loss did she make on the shares?

12.    Ross buys 400 shares for £340
    He then sells 25% of his shares for £1.20 each
    He must pay a sellers fee of 2.5%
    a) How much has Ross made selling shares so far

    Ross then sells the rest of his shares for £1.05 each.
    He must still pay a sellers fee of 2.5%

    b) How much money has Ross sold all of his shares for?

    c) How much profit has Ross made selling his shares?

13.    (Calculator) Gina buys 300 shares for £1.35 each.
    Gina finds an online investor from Europe looking to buy her shares.
    He offers her 680 euros for her shares.
    Gina checks and the current exchange rate is £1 = 1.24 euros.
    Would Gina make a profit or loss selling the shares and how much would it be?

14.    (Calculator) Henry buys 420 shares for £2.70 each
    Henry finds an investor from America to buy his shares.
    The investor offers Henry $1510
    Henry sees that the exchange rate is £1 = $1.45
    Henry must also pay a 2% selling fee.
    Would Henry make a profit or loss selling the shares and how much would it be?

15.    (Calculator) Jamie buys 340 shares for £1.90 each
    James finds an investor from Europe to buy his shares.
    The investor offers James 910 euros
    James sees that the exchange rate is £1 = 1.15 euros
    James must also pay a 2.5% selling fee.
    Would James make a profit or loss selling the shares and how much would it be?

16.    (Calculator) Anna buys 520 shares for £1.40 each
    Anna finds an investor from America to buy her shares.
    The investor offers Anna $725

Anna sees that the exchange rate is £1 = $1.30
Anna must also pay a 4% selling fee.
Would Anna make a profit or loss selling the shares and how much would it be?

17.    (Calculator) Samantha buys 4000 shares for £2500
       She sells 30% of the for £1.40 a share.
       After selling the rest she has made a profit of £1300.
       How much did she sell each of the last shares for?

18.    (Calculator) Kenny buys 2400 shares for £3000
       He sells 40% of them for £0.50
       After selling the rest he has made a £1000 loss on his shares.
       How much did he sell each of the last shares for?

19.    (Calculator) Steven buys 1800 shares for £2000
       He sells 35% of them for £1.30 each
       He sells the rest and makes a total profit of £4084
       How much did he sell each of the last shares for?

# Chapter 11: Hire Purchase

1.    Emily is planning to buy a new laptop which has a cash price or £1380. She decides to use a finance package that is available. The breakdown of the payment structure is as follows.

- A deposit of 25% of the cash price
- 6 monthly payments of £165
- A final payment of £240

Calculate how much Emily will spend on a laptop.


2.    Thomas is planning on buying a new bed which has a cash price of £860 He decides to use the following payment plan.

- A deposit which is $\frac{1}{8}$ of the cash price
- 12 monthly payments of £62
- A final payment of £140


Calculate how much Thomas will spend on his new bed.


3.    Danny is planning on buying a new guitar and amp which costs a total of £1250. He decides to pay for it with the following payment plan.

- A deposit of 30% of the cash price
- 6 monthly payments of £190
- A final payment of £55

Calculate how much in total Danny will spend on the guitar/


4.    Lynsey is planning on buying a new TV which has a cash price of £1099 She decides to use the following payment plan.

- A deposit which is $\frac{1}{7}$ of the cash price
- 9 monthly payments of £85.40
- A final payment of £208.25


Calculate how much Lynsey will spend on her new TV


5.    Graham is going on holiday. He pays for it through a travel agent using the following payment structure.

- A deposit of £310
- 8 even monthly payments
- A final payment of £120

The total cost of the holiday is £1210. How much are each of the monthly payments?

6. Erin is buying a new kitchen. She uses the following payment plan

- A deposit of £520
- 20 even monthly payments
- A final payment of £150

Erin spent a total of £2855 on the plan. How much were each of the monthly payments?

7. Lulu is getting an extension put onto her house. She uses the following payment plan.

- A deposit of £800
- 10 even monthly payments
- A final payment of £560

The total cost of the extension is £3215. How much were each of the monthly payments?

8. Malcolm buys a new washing machine that ends up costing him £870 in total His payments involve a deposit and 12 monthly payments of £55.20. How much was the deposit?

9. (Calculator) Ian paid for a new garage. The total cost of the garage is £8500 Ian paid 30% of the cost of the garage as a deposit
a) How much did Ian pay as a deposit.
Ian then spread the rest of the payments across 35 months
b) How much per month did the new garage cost Ian?

10. (Calculator) Simone is buying a hot tub. The total cost of the hot tub is £1800.
Simone pays for 25% of the hot tub as a deposit.
a) How much did Simone pay as a deposit
The rest is paid off across 24 monthly instalments,
b) how much is each monthly instalment.

11.   (Calculator) Amy is buying a new motorcycle. In total she pays £9,500.
      She pays 12.5% of the cost up front as a deposit. The rest she pays over 25
      months. How much were each of the monthly payments?

12.   Mr Dune is looking at getting his kitchen done. The cost of the kitchen that
      Mr Dune wants is £4000. He looks at two companies that offer the following
      payment plans.
      - Company 1: 30% of the cost as a deposit. 12 monthly payments of
        £260.
      - Company 2: $\frac{1}{8}$ of the cost as deposit. 20 monthly payments of £182.

      Which company offers the cheaper deal?

13.   (Calculator) Miss Lions is buying a new laptop which costs £980. She looks at
      the following deals.
      - Company 1: 20% of the cost as a deposit and 16 monthly payments of
        £52
      - Company 2: $\frac{1}{4}$ of the cost as a deposit and 14 monthly payments of
        £62.50

      Which company offers the cheaper deal and by how much?

14.   Mr Quinn is buying a new sofa. The cash price of the sofa is £795
      He decides to use a payment plan that costs a total of £845
      The payments are as follows
      - deposit of 25% of the cash price
      - 8 equal monthly instalments
      - final payment of £114.25

      Calculate how much the monthly instalments are.

15.   Jen is buying a shed for the garden. The cash price of the shed is £411
      She decides to use a payment plan that costs a total of £492.20
      - deposit $\frac{1}{6}$ of the cash price
      - 8 equal monthly instalments
      - final payment of £35.70

      Calculate how much the monthly instalments are.

16.   Amina is buying a new set of golf clubs. The advertised price of the clubs is
      £698. She decides the use a payment play to pay for them.
      The total price of the payment plan is 15% more than the price of the
      advertised price.
      The payments are calculated as follows

- deposit $\frac{1}{10}$ of the cash price
- 10 equal monthly instalments of £64.25
- final payment

How much will the final payment be?

17.   (Calculator) Erin is going on holiday. The advertised cost of the holiday is £1300. But she decides to pay for it using a payment plan which costs 12% more than the advertised cost.

The payments are as follows,
- deposit of $\frac{1}{8}$ of the advertised price.
- 6 equal monthly payments
- final payment of £84.20

How much are each of the monthly payments.

18.   Tony bought a new car.  The full price of the car was £14 000.

Tony purchased the car using a Hire Purchase agreement.

- When he  first bought the car, tony immediately paid a deposit of $\frac{1}{4}$ of the full price.
- Total interest of 15% was added to the amount that remained **after** the deposit was paid.
- All repayments are £480 per month.

Tony has made 8 repayments so far.
Calculate the balance that Tony still has to pay.

19.   Jill bought a new motorcycle.  The full price of the motorcycle was £9000.

Jill purchased the motorcycle using a Hire Purchase agreement.

- When she  first bought the car, Jill immediately paid a deposit of $\frac{1}{6}$ of the full price.
- Total interest of 20% was added to the amount that remained **after** the deposit was paid.
- All repayments are £610 per month.

Jill has made 13 repayments so far.
Calculate the balance that Jill still has to pay.

20. Mark bought a new car. The full price of the car was £18 200.

   Mark purchased the car using a Hire Purchase agreement.

   - When he first bought the car, Mark immediately paid a deposit of $\frac{2}{7}$ of the full price.
   - Total interest of 15% was added to the amount that remained **after** the deposit was paid.
   - All repayments are £440 per month.

   Mark has made 6 repayments so far.
   Calculate the balance that Mark still has to pay.


21. Stuart bought a new car. The full price of the car was £12 500.

   Stuart purchased the car using a Hire Purchase agreement.

   - When he first bought the car, Stuart immediately paid a deposit of $\frac{3}{8}$ of the full price.
   - Total interest of 12% was added to the amount that remained **after** the deposit was paid.
   - All repayments are £415 per month.

   Stuart has made 15 repayments so far.
   Calculate the balance that Stuart still has to pay.

# Chapter 12: Interest and Loan Repayments

This chapter should be done with a calculator.

1. For each of the following amounts use these APRs to calculate the monthly payments over 1 year. Give your answer to the nearest penny when appropriate.

| Under £1000 | 1000-2000 | 2001-3000 | 3001-4000 | +4000 |
|---|---|---|---|---|
| 7.5% | 6.3% | 5.8% | 4.5% | 4.1% |

a) Borrowing £750
b) Borrowing £2400
c) Borrowing £5600
d) Borrowing £3650

2. For each of the following amounts use these interest rate to calculate the monthly payments over 6 months, 1 year, 2 years or 3 years. Give your answer to the nearest penny when appropriate.

|  | Under £1000 | 1000-2000 | 2001-3000 | 3001-4000 | +4000 |
|---|---|---|---|---|---|
| 3 years | 11.5% | 9.7% | 8.4% | 7.7% | 7% |
| 2 years | 10.9% | 9% | 7.6% | 6.5% | 4.2% |
| 1 year | 9.8% | 8.1% | 6.2% | 4.9% | 3.6% |
| 6 months | 8.5% | 8% | 5.1% | 4.2% | 2.5% |

a) Borrowing £2800 for 2 years.
b) Borrowing £7000 for 6 months
c) Borrowing £1200 for 6 months
d) Borrowing £3300 for 1 year
e) Borrowing £2250 for 3 years

3. Vince needs to borrow £4000 he see's two options
   - Option 1: 8.6% APR, if he repays it over 1 year
   - Option 2: Pay back over 6 months, paying £750 a month

   Which option means that Vince pays the least amount of money.

4. The Martin family are buying a new car  for £8000 but they need to take out a loan.
   They have two options.
   Option 1: 9.5% interest rate over 2 year.
   Option 2: 7.6% interest rate over 1 years.
   Calculate the difference in monthly payments between the two options.

5.  Olivia borrows £6800. She has two options to repay it.
    Option 1: 6.2% interest rate over 1 year
    Option 2: 5.5% interest rate over 6 months
    Calculate the difference in monthly payments between the two options

6.  Harry borrows £12,000. He has two options to repay it.
    Option 1: 5.8% interest rate over 2 years
    Option 2: 7.1% interest over 3 years
    Calculate the difference in monthly payments between the two options

7.  Lewis borrows £5500. He has three options to repay it.
    Option 1: 3.2% interest rate over 1 year
    Option 2: 5.3% interest rate over 18 months
    Option 3: 8.1% interest rate over 2 years

    a) Calculate the monthly payments of the three options

    Lewis decides he can afford £350 a month

    b) Which Option should Lewis use?

8.  Esme has spent £1600 on her credit card. Her bank charges her £85 a month
    for the following 6 months.

    Esme realises this and takes out a loan to cover the money spent on her
    credit card plus the additional charges.

    a) How much money does Esme need to borrow

    The loan Esme takes has an interest rate of 7.5% and she must pay it back
    over the next 18 months.

    b) How much will Esme pay per month? (to the nearest pound)

9.  Andrew has spent £2140 on his credit card. Every month the bank charges
    Andrew £114 when it remains unpaid for 8 months.

    a) How much does Andrew have on his credit card to pay after the charges?

    Andrew then takes up a loan for the amount. The interest rate is 12.7% and
    it must be paid monthly over the next 3 years.

    b) How much will Andrew spend per month on loan repayments? (to the
    nearest pound)

10. Fill in the missing parts of the following table.

| Loan amount | £3000 | | £5000 | | £7000 | |
|---|---|---|---|---|---|---|
| Interest per year | 15% | | 12.5% | | 11% | |
| Repayments over 1 year | Monthly | Total | Monthly | Total | Monthly | Total |
| | £287.50 | A | B | £5625 | C | D |

Calculate the missing values of A, B, C and D


11. Fill in the missing parts of the following table.

| Loan amount | £2000 | | £4000 | | £6000 | |
|---|---|---|---|---|---|---|
| Interest per year | 22.4% | | 19.7% | | 15.4% | |
| Repayments over 1 year | Monthly | Total | Monthly | Total | Monthly | Total |
| | A | £2448 | £399 | B | C | D |

Calculate the missing values of A, B, C and D


12. Fill in the missing parts of the following table.

| Loan amount | £2000 | | £3000 | | £6000 | |
|---|---|---|---|---|---|---|
| Interest per year | 13.5% | | 11.8% | | 10.4% | |
| Repayments over 1 year | Monthly | Total | Monthly | Total | Monthly | Total |
| | A | £2270 | £279.50 | B | C | D |

a) Calculate the missing values of A, B, C and D

Tom and Christina want to take out a £6000 loan.

b) What would be the difference in overall payments between taking out an overall loan of £6000, compared to each of them taking out a loan of £3000?

13. **BE CAREFUL!** Fill in the missing parts of the following table.

| Loan amount | £4000 | | £8000 | |
|---|---|---|---|---|
| Interest per year | 14% | | 12% | |
| Repayments over **2 years** | Monthly | Total | Monthly | Total |
| | £216.60 | A | B | £9856.80 |

Calculate the missing values of A, B, C and D

14. **BE CAREFUL!** Fill in the missing parts of the following table.

| Loan amount | £2000 | | £4000 | | £8000 | |
|---|---|---|---|---|---|---|
| Interest per year | 8% | | 5% | | 2% | |
| Repayments over **2 years** | Monthly | Total | Monthly | Total | Monthly | Total |
| | £97.20 | A | B | £4410 | C | D |

Calculate the missing values of A, B, C and D

# Chapter 13: Comparing Cost and Best Deals

1. Tesco sells bottles of cola at two different prices. A 500ml bottle costs £1.20 and a litre bottle costs £2.20.

   (a) Calculate the cost per 100ml for the 500ml bottle
   (b) Calculate the cost per 100ml for the 1 litre bottle.
   (c) Which is better value?

2. A shop sells packs of eggs in the following mounts
   6 eggs - £1.44
   10 eggs - £2.50
   12 eggs - £3.12
   Which deal is the best per egg.

3. (Calculator) A shop sells flour in the following amounts.
   250g – 55p
   600g - £1.32
   1.3kg - £2.63
   Which of these is the best deal?

4. (Calculator) A fast food restaurant sells chicken nuggets at the following amounts and prices.
   4 nuggets - £1.99
   6 nuggets - £2.85
   9 nuggets - £3.40
   20 nuggets - £4.99
   How much cheaper per nugget is it to buy 20 than to buy 6?

5. (Calculator) A shop sells packets of crisps in the following amounts.
   4 packets - £1.20
   10 packets - £2.80
   15 packets – £4.15
   Which of these is the best deal?

6. (Calculator) A manufacturer sells planks of wood at three different amounts. Pack A which is 8kg for £40. Pack B which is 15kg for £70 and Pack C which is 50kg for £200.
   Which is the best value for money.

7. In a shop snacks are sold separately or in packs of 4, 6 and 12. The prices are as follows.

   Single pack = 55p
   Four Pack – £1.80
   Six Pack - £2.90

Twelve Pack - £5.90

Which is the best value for money.

**8.** Mrs Thompson is hiring an electrician. Online she finds two different companies willing to send someone.

Company 1's Offer: £35 deposit plus £18 for every hour of work.
Company 2's Offer: No deposit, £22 for every hour of work.

(a) Mrs Thompson estimates that the job will take 5 hours. Which company should she choose and why?

(b) What is the minimum number of hours required so that she chooses the other company?

9.  (Calculator) A builder is buying screws. There are three choices.

Supplier 1 – 2000 screws for £23
Supplier 2 – 3200 screws for £41.50
Supplier 3 – 4500 screws for £61.20

Which supplier should they use if they wish to get the best deal?

10.  Mrs McDougall is getting her roof fixed. She tries calling three different companies.

Company A – Tell her that it is £40 as a call out fee. Plus the added charge of £25 per hour plus materials.

Company B – The call out fee is £65 with a fee of £20 per hour. With any cost of materials added on at the end.

Company C - offer no call out fee and will charge £500 for the whole job.

It is estimated that it would take 14 hours and that materials would cost £130. List the three companies in order of cheapest to most expensive.

11.  The Thomas family are looking to go on holiday. Their travel agent tells them that it will cost £1120 and has three offers for them.

Offer 1: Pay 25% deposit plus 6 monthly payments of £160
Offer 2: Pay 15% deposit plus 12 monthly payments of ££90
Offer 3: Pay 40% deposit plus 3 monthly payments of £235.

Which offer should the Thomas family take? Explain your answer

12. Simon is looking to buy a new TV which costs £440. He has two options.
Option 1: Pay 15% up front. Then 6 monthly instalments of £65.40
Option 2: Pay 30% up front. Then 12 monthly instalments of £33.60

Which offer is cheaper and how much does extra does Simon spend compared to just buying the TV outright?

13. Fiona is buying a new kitchen. She can either pay for it up front at £2270 or she can pay a first instalment of 30%, followed by 12 payments of £145. How much money would Fiona save paying for it all up front?

14. A restaurant supplier sells Potatoes in two sizes of bag.

A 12kg bag that costs £53.04
A 20kg bag that costs £89

Which size of bag is better value for

15. (Calculator) Kelsie is building her own computer and is looking into the prices of each of the individual parts in the shops below.

| Part/Shop | Computers R Us | Cheap CPUs | Star Tech | The IT Guys |
|---|---|---|---|---|
| CPU | £88.90 | £93.40 | £86.20 | £90.50 |
| Motherboard | £56.90 | £76.20 | £66.40 | £62.10 |
| RAM | £45.60 | £30.10 | £33.40 | £51.00 |
| Power Supply Unit | £60.40 | £60.40 | £77.10 | £65.70 |
| Computer Case | £55.20 | £54.30 | £48.90 | £49.60 |

a) What is the cheapest that Kelsie can build the computer for?

b) Cheap CPUs are running a deal where the computer costs £250, she pays a deposit of 20%. Then 12 payments of £18.99. How much more will she pay using this method?

16.  Mr Law is looking to buy presents for Christmas.
His children want each of the following things. Toy castle, a football net, a new games console and a board game.

| Toy/Shop | Toys Galore | Toy Land | The Toy Palace | The Toy Shop |
|---|---|---|---|---|
| Toy Castle | £76.50 | £78.99 | £76.99 | £80.49 |
| Football Net | £131 | £127.99 | £126.99 | £135.99 |
| Games Console | £400 | £340 | £360 | £380 |
| Board Game | £30 | £30 | £28 | £35 |

a) What is the cheapest that Mr Law could buy all these presents for?

b) What is the difference in cost between buying all the present from 'The Toy Shop' and buying them all from 'Toy Land'?

# Answers
## Chapter 1: Basic Wages

1(a) £222
(b) £338
(c) £367.50
(d) £399
(e) £252
(f) £306
(g) £462.50
(h) £426
(i) £183.75
(j) £309.75
(k) £427.50
(l) £282.50
(m) £336
(n) £329.70

2(a) £40,800
(b) £16,200
(c) £30600
(d) £18720

3(a) £26000
(b) £57200
(c) £31200
(d) £48100

4(a) £1600
(b) £1500
(c) £2600
(d) £3200

5. £297.50

6. £462.50

7. £336

8. £533

9. £399

10. £306.75

11. £410

12. £378

13. £237.50

14. £295.80


## Chapter 2: Overtime

1(a). time and a half: £13.50
double time: £14.00
(b) time and a half:£21
double time: £28
(c) time and a half: £16.50
double time: £22
(d) time and a half: £12.75
double time: £17
(e) time and a half: £14.10
double time: £18.80
(f) time and a half: £15.30
double time: £20.40
(g) time and a half: £21.45
double time: £28.60
(h) time and a half: £35.55
double time: £47.40

2(a) £144
(b) £105
(c) £63.75
(d) £123.75
(e) £165
(f) £117
(g) £245.25
(h) £124.20

3. £270

4. £243.60

5. £348.40

6. £392

7. £326.40

8. £268.75

9. £292.25

10. £535.50

11. £550.80

12. £392

**Chapter 3: Commission**

1. £90

2. £375

3.  £420

4. £177

5. £42.50

6. £105.60

7. £120

8. £57

9. £166.80

10. £365

11. £1260

12. £578

13. £1490

14. £296.10

15. £1765

16. £364

17. £265.20

18. £330

19. £564.20

20. £510.30

**Chapter 4: Deductions**

1a.£104
b. £165.50
c. £125.86

2a. £342.55
b. £1111.40
c. £322.30
d. £1790.10

3. £507.25

4. £497.20

5. £31 748

6. £2916.67

7. £2004.17

8. £1512.47

9. £204.95

10. £352.40

11a. £577.50
b. £457.05

12a. £365.8
b. £273.77

13a.£342
b. £231.30

14a. £768
b. £534.90

15a. £428.40
b. £258.21

**Chapter 5: National Insurance Payments**

1. £1560

2. £3000

3. £2795.40

4. £3667.80

5. £3671

6. £3895

7. £3752.50

8. £4195.40

9. £4831.40

10. £4226.60

11a. £3347.40

b. £25100.50

12a. £4250.80

b. £4296.18

13a. £2718

b. £23566

14a. £3859

b. £37119

15a. £3778

b. £2882.50

## Chapter 6 Saving Wages

1a. £255
b. £126

2a. £408
b. £330

3a. 288
b. £179.50
c. £71.80

4a. £345
b. £202
c. £333.30, no she needs more

5a. £1200
b. 25%
c) £345

6a. £392

b. £294
c. £793.80, yes she will

7a. £675
b. £451.50
c. £1128.75

8a. £492
b. £369
c. 40%

9a. £405
b. £277
c. £124
d. £86.80

10a. £892
b. £722.90
c. 34%

11a. £3200
b. £2400
c. £552
d. 4 months

12a. £4113
b. £4040.58
c. £2887.58
d) no, only has £1155

## Chapter 7 – Wages Exam Questions

1a. £220.60
b. £60.60
c. £484.80, yes she will

2a. £1916.40
b. £20747.78

3. £493

4a. £680
b. £534

c. £385
d. £2887.50

5. £280.80

6a. £2575
b. £1851.20

7. £700

8a. £1284
b. £1104.24
c. 45.3%

9a. £4061
b.£46022.98

10a. £1476.50
b. £73.95

## Chapter 8 – Foreign Exchange Basic

1a. 136.80 euros
b. 10962 peso
c. 112408 yen
d. 432.08 Zloty
e. 2280 AUS Dollars
f. he got 30 euros more

2a. 1400 Zloty
b. 3750 Yen
c. 90 Euros

3a. £234.38
b. £32.84
c. £213.51
d. £564.97
e. £151.58
f. £1052.63

4a. 127
b. 97

5a.400.78 euros
b. 4334.21 peso
c. 77.39 AUS Dollars
d. 37.44 euros

6a. £1 = 1.2 euros
b. £1 = 27.78 peso
c. £1 = 156.25 Yen

7a. 330 euros
b. £289.47

8a. £101.56
b. £13.44

9. £205.25

10. 51 million pounds

11. £88 – UK is cheapest

12. £50847.46

13. £454

14. £537.60

## Chapter 9 – Foreign Exchange Exam

1a. 3500
b. 1625 AUS Dollars

2a. 1305 euros
b. 365 euros

3a. 600,000 forint
b. 1050 euros

4a. 14000 Zloty
b. £831

5a. 18000 Peso
b. £917 (916.66)

6a. 17600 Krone
b. 2250 euros

7a. 420000 yen
b. 3825 AUS Dollars

8a. 25220 Lira
b. 2254.23 Swiss Francs

9. 21350 euros from factory

10. £685.71 – European supplier is cheapest

11. £2439.64 – European supplier is the cheapest

12. no, need 108 euros more

13. UKs best Europe deals

14. 1125 euros

15. 1591.90 euros

16. 868 euros

17a. 391
b. 27th Jan

18a. 87320 yen
b. 1770yen
c. 18th March

## Chapter 10 – Shares

1. £250

2. £1.80 per share

3. £140

4. £59.10

5. £111.60

6. £178.37

7. £239.60

8. £170.25

9. £45

10. £2117.60

11. £1144

12a. £117
b. £424.13
c. £84.13

13. 177.80 euros/£143 Profit

14. 101.41 Dollars/£69.94

15. 185.69 euros, £161.47

16. $183.54 / £141.19

17. £1.17 per share

18. £1.05 per share

19. £4.50 per share

## Chapter 11 – Hire Purchase

1. £1575bar
2. £991.50
3. £1570
4. £1133.85
5. £97.50
6. £109.25
7. £185.50

8. £207.60
9a. £2550
b. £170
10a. £450
b. £56.25
11. £332.50
12. Company 2 is £180 cheaper
13. Company 1 is £92 cheaper
14. £66.50
15. £48.50
16. £90.40
17. £201.55
18. £8235
19. £1070
20. £12310
21. £2525

## Chapter 12 – Interest and Loan Repayments

1a. £67.19
b. £211.60
c. £485.80
d. £317.85

2a. £125.53
b. £1195.83
c. £216
d. £288.48
e. £67.75

3. Option 1 is £156 cheaper

4. Option 1 is £352.30 a month cheaper

5. Difference is £593.87

6. Difference is £172

7a. O1: £573
O2: £321.75
O3: £247.73

b. 0ption 2 or 3 is within budget.
Option 2 pays it off faster.

8a. £2110
b. £126

9a. £3052
b. £96

10. A = £3450
B = £468.75
C = £647.50
D= £7770

11. A = £204
B = £4788
C = £577
D= £6924

12. A = £189.16
B = £3354
C = £552
D= £6624
b. £84 cheaper to get the £6000 loan

13. A = £5198.40
B = £410.70

14. A = £2332.80
B = £367.50
C = £346.80
D= £8323.70

## Chapter 13 – Comparing Cost and Best Deals

1a. 24p
b. 22p
c. The 1L bottle is cheaper

2. 6 eggs for £1.44 is the best deal

3. 1.3kg is 20p per 100g which is the cheapest.

4. 20 nuggests is 25p per nugget which is the cheapest.

5.  15 packets for £4.15 is the cheapest

6. Pack C is £4 per kg, so it is the cheapest

7. Four is 45p each, which is the cheapest

8a. Company 2 is £15 cheaper
b. 9 hours

9. Supplier 1 is the best deal (1.15p per screw)

10. BCA

11. Option 3 (£1153) is cheapest

12. Option 1 (£458.40), means he spends £18.40 more than the retail price.

13. £151

14. 12kg for £53.94

15a. £158.70
b. She spends £119.18 more

16a. £571.44
b. Toy land is £54.50 cheaper