



Percentage of Amounts

The entirety of this worksheet should be completed without a calculator.

Section 1: Test Scores

1. Convert the following test scores into percentages.

- a. 30 out of 60.
- b. 7 out of 10.
- c. 16 out of 20.
- d. 40 out of 60.
- e. 18 out of 20.
- f. 15 out of 18
- g. 12 out of 40.
- h. 50 out of 150
- i. 15 out of 35
- j. 20 out of 85

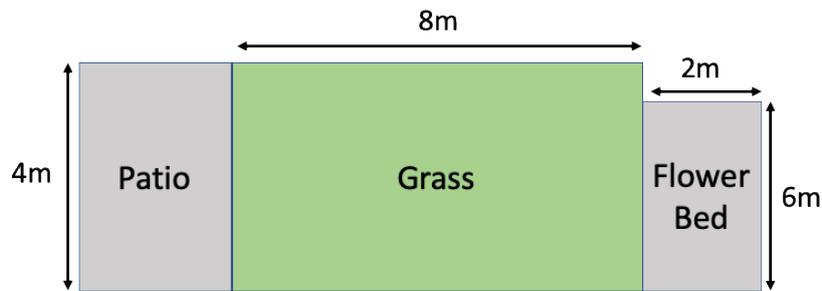
Section 2: Percentage Profit and Loss

1. A house is bought for £80,000 and sold for £100,000, calculate the percentage profit.
2. A house is bought for £120,000 and sold for £90,000, calculate the percentage loss.
3. A car is bought for £20,000. Its value increases by 10% every year for two years. Calculate the percentage increase from two years ago till now.
4. Craig buys 20 books for £6 each. He manages to sell them all for £200. What is his percentage profit?
5. Tilly pays £15 to buy ingredients to make cakes and pie. She sells them all for £18, what is her percentage profit?
6. Brian buys a motorcycle for £12000, he sells it for £8500. What is the percentage loss?

Section 3: Problem Solving

1. Mrs Jones has decided to remove the flower bed from the garden and instead increase the amount of grass she has.

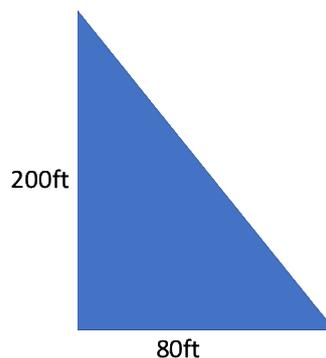
- Calculate the original area of grass in her garden.
- Calculate the new total area of grass.
- Calculate the percentage increase.



2. In her first week of work Tina earns £5.60 an hour. She works for 20 hours that week.

- Calculate her total wage that week
- Tina's wage increase to £6.40 an hour the following week, calculate her wage if she still works 20 hours that week.
- Calculate the percentage increase in her wages from week one to week two.

3. In the year 1991, measurements of a snow slope were shown below.



- Calculate the gradient of the snow slope.
- By the year 2018 the vertical height had been reduced to 180ft, but the horizontal distance remained the same. Calculate the new gradient.
- Calculate the percentage that the gradient has decreased between 1991 and 2018.

4. A race course is built up into 4 stages which a race car drives through, registering the following times.

Stage 1: 1 minutes 20 seconds

Stage 2: 2 minutes 35 seconds

Stage 3: 3 minutes 5 seconds

Stage 4: 1 minute 20 seconds.

Calculate the percentage of time spent on stage 4.

5. Look at the petrol gauge below, what percentage of the tank is left?



6. Jack is playing a game. In order to win the game, you need to roll two dice and get two numbers that add up to a number greater than 9. What is Jack's probability of winning as a percentage?

7. **Use a calculator:** An information company's logo has been shown below. What percentage of the logo is made up of the rectangle?

