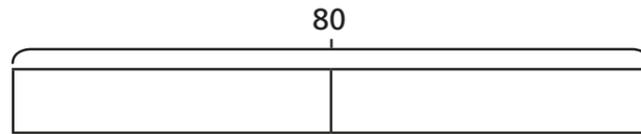


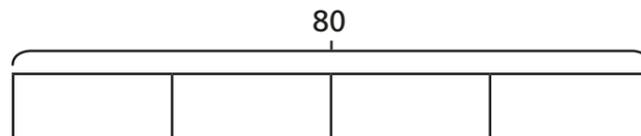
Find a percentage of a given amount using mental methods

1 Match the percentage calculations to the bar models.

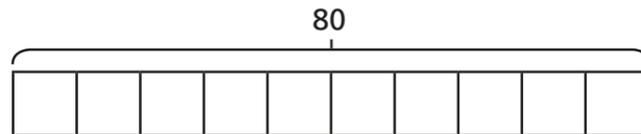
10% of 80



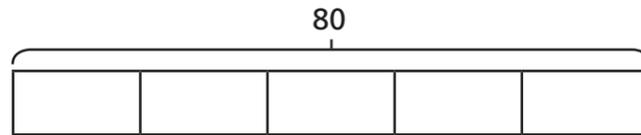
20% of 80



25% of 80



50% of 80



Explain how the models can help with each question.

2

To find 10% of a number you divide by 10, so to find 5% of a number you divide by 5



Is Amir correct? _____

Explain your reasoning.

3 Complete the calculations.

50% of £150 =

20% of £150 =

25% of £150 =

10% of £150 =

75% of £150 =

5% of £150 =

4



To find 75% of a number, you can work out 25% and multiply this value by 3

How many other ways could you find 75% of a number?

5

Use the calculations on the right to help you work out the calculations on the left.

a) 3% of 1,020 =

1% of 1,020 = 10.2

b) 3% of 781 =

6% of 781 = 46.86

c) 70% of 4,320 =

7% of 4,320 = 302.4

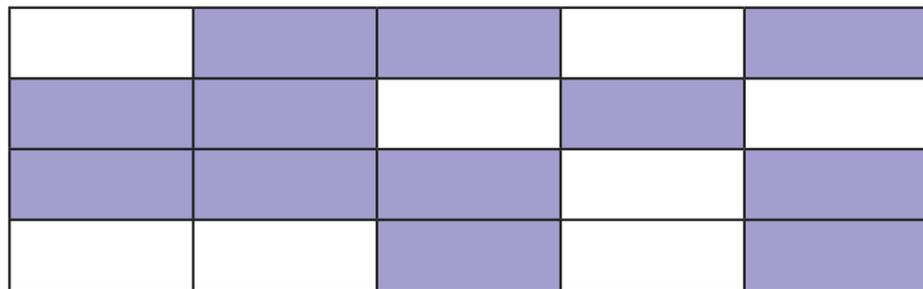
d) 95% of 120 =

5% of 120 = 6

e) 99% of 800 =

1% of 800 = 8

- 6 A rectangle is divided into identical smaller rectangles.



- a) How many more rectangles need to be shaded so that 75% of the shape is shaded?
- b) How many shaded rectangles need to be unshaded so that 50% of the shape is shaded?
- c) How many more rectangles need to be shaded so that 5% of the shape is not shaded?

- 7 Ms Hall has £700 in her bank account. She spends 45% of her money on rent. How much money does she have left?

Ms Hall has left.

- 8 Find the missing values.

% of 60 = 15

% of 30 = 15

% of 120 = 15

- 9 a) Work out 95% of 800

- b) What method did you use?
Could you have used a different method?

- 10 Find the missing numbers in these calculations.

a) 30% of = $\frac{1}{3}$ of 90

b) 35% of 200 = 70% of

c) 40% of 120 = 20% of

d) $\frac{1}{5}$ of = 80% of 36

- 11 Find the values of the shapes.

30% of  = 

10% of  = 

50% of  = 0.75

 =

 =

 =