

Express one number as a fraction or percentage of another without a calculator



Express one number as a fraction or percentage of another without a calculator

1. Write the first quantity as a fraction and a percentage of the second quantity.

- a) 17 m, 20 m
- b) £16, £25
- c) 3 cm, 50 cm
- d) £130, £1 000
- e) 650 g, 1 kg

2. Brett has a £20 note. He spends £3 on lunch and £8 on a book.

- a) What fraction of his money does he have left?
- b) What percentage of his money does he have left?



Express one number as a fraction or percentage of another without a calculator

3. Tommy says

I got 28 out of 40 in my geography test. I can't turn this into a percentage without a calculator because 40 isn't a factor of 100.

Show that Tommy is wrong.

4. A 400 g bar of Nutty chocolate, contains 120 g of nuts.



A 260 g bar of Nutz chocolate, contains 91 g of nuts.

Which bar contains a higher percentage of nuts?
Explain your answer.



Answers



Express one number as a fraction or percentage of another without a calculator

1. Write the first quantity as a fraction and a percentage of the second quantity.

a) 17 m, 20 m 85%

b) £16, £25 64%

c) 3 cm, 50 cm 6%

d) £130, £1 000 13%

e) 650 g, 1 kg 65%

2. Brett has a £20 note. He spends £3 on lunch and £8 on a book.

a) What fraction of his money does he have left? $\frac{9}{20}$

b) What percentage of his money does he have left? 45%



Express one number as a fraction or percentage of another without a calculator

3. Tommy says

I got 28 out of 40 in my geography test. I can't turn this into a percentage without a calculator because 40 isn't a factor of 100.

Show that Tommy is wrong.

$$\frac{28}{40} = \frac{14}{20} = \frac{70}{100} = 70\%$$

Tommy got 70% in his test.

4. A 400 g bar of Nutty chocolate, contains 120 g of nuts.



Needpix

A 260 g bar of Nutz chocolate, contains 91 g of nuts.

Which bar contains a higher percentage of nuts?

Explain your answer.

Nutz bar contains 35% of nuts.

$$\text{Nutty } \frac{120}{400} = 30\%, \text{ Nutz } \frac{91}{260} = 35\%$$

