

Writing one amount as a fraction of another

1) Use the given proportion table to answer the question at the top of each

a)

Write 18 as a fraction of 30	
Proportion	Amount
Whole	30
	18

b)

Write 16 as a percentage of 20	
Proportion	Amount
100%	20
	16

c)

$\frac{5}{6}$ of a number is 35. Find it	
Proportion	Amount
$\frac{5}{6}$	35
Whole	

d)

45% of a number is 36. Find it	
Proportion	Amount
45%	36
100%	

2a) What fraction of 24 is 8?

b) What fraction of 30 is 25?

c) What fraction of 35 is 15?

d) What fraction of 28 is 70?

e) 5 is $\frac{?}{?}$ of 60

f) 12 is $\frac{?}{?}$ of 18

g) 80 is $\frac{?}{?}$ of 50

h) 72 is $\frac{?}{?}$ of 48

i) Write 12 as a percentage of 25

j) Write 50 as a percentage of 80

k) What percentage of 32 is 80?

l) Write 56 as a fraction of 35

3) Give the facts below, find the unknown number

a) $\frac{1}{4}$ of a number is 8.

b) $\frac{1}{5}$ of a number is 12.

c) $\frac{2}{3}$ of a number is 14.

d) $\frac{4}{5}$ of a number is 60.

- e) $\frac{3}{4}$ of a number is 6. f) $\frac{1}{3}$ of a number is $\frac{1}{2}$.
- g) $\frac{2}{3}$ of a number is 5. h) $\frac{3}{7}$ of a number is 8.
- i) $\frac{7}{8}$ of a number is $\frac{1}{2}$. j) $\frac{2}{3}$ of a number is $\frac{1}{5}$.

4a) $\frac{3}{4}$ of a number is 27. Find $\frac{7}{8}$ of that number

b) $\frac{1}{6}$ of a number is 15. Find $\frac{3}{5}$ of that number.

c) $\frac{1}{2}$ of a number is $\frac{1}{3}$. Find $\frac{1}{5}$ of that number.

5) Write 0.27 as a fraction of 36%

6) Write 1.2 as a fraction of 75%

Challenge

1) Part of a bridge spans a river 35m wide. One third of the length of the bridge is on one side of the river and 20% of the length of the bridge is on the other side.

How long is the bridge?

2) I have a bag of coins. In it, one third of the coins are gold, one fifth of them are silver, two sevenths are bronze and the rest are copper.

What do we know about the number of coins in my bag?

3) Peter wanted to buy a book, but he didn't have any money. He bought it with the help of his father and his two brothers. His father gave him half of the amount given by his brothers. His elder brother gave him one third of what the others gave. The younger brother gave him 10 euros. What was the price of the book?

Answers

1a) $\frac{3}{5}$ b) 80% c) 42 d) 80 2a) $\frac{1}{3}$ b) $\frac{5}{6}$ c) $\frac{3}{7}$ d) $\frac{5}{2}$ e) $\frac{1}{12}$ f) $\frac{2}{3}$ g) $\frac{8}{5}$ h) $\frac{3}{2}$ i) 48% j) 62.5%

k) 250% l) $\frac{8}{5}$ 3a) 32 b) 60 c) 21 d) 75 e) 8 f) $\frac{3}{2}$ g) $\frac{15}{2}$ h) $\frac{56}{3}$ i) $\frac{4}{7}$ j) $\frac{3}{10}$ 4a) 31.5

b) 54 c) $\frac{2}{15}$ 5) $\frac{3}{4}$ 6) $\frac{8}{5}$ C1) 75m C2) Multiple of 105 C3) 24 Euros