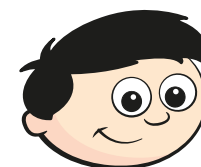


Express one number as a fraction or a percentage of another using calculator methods

3

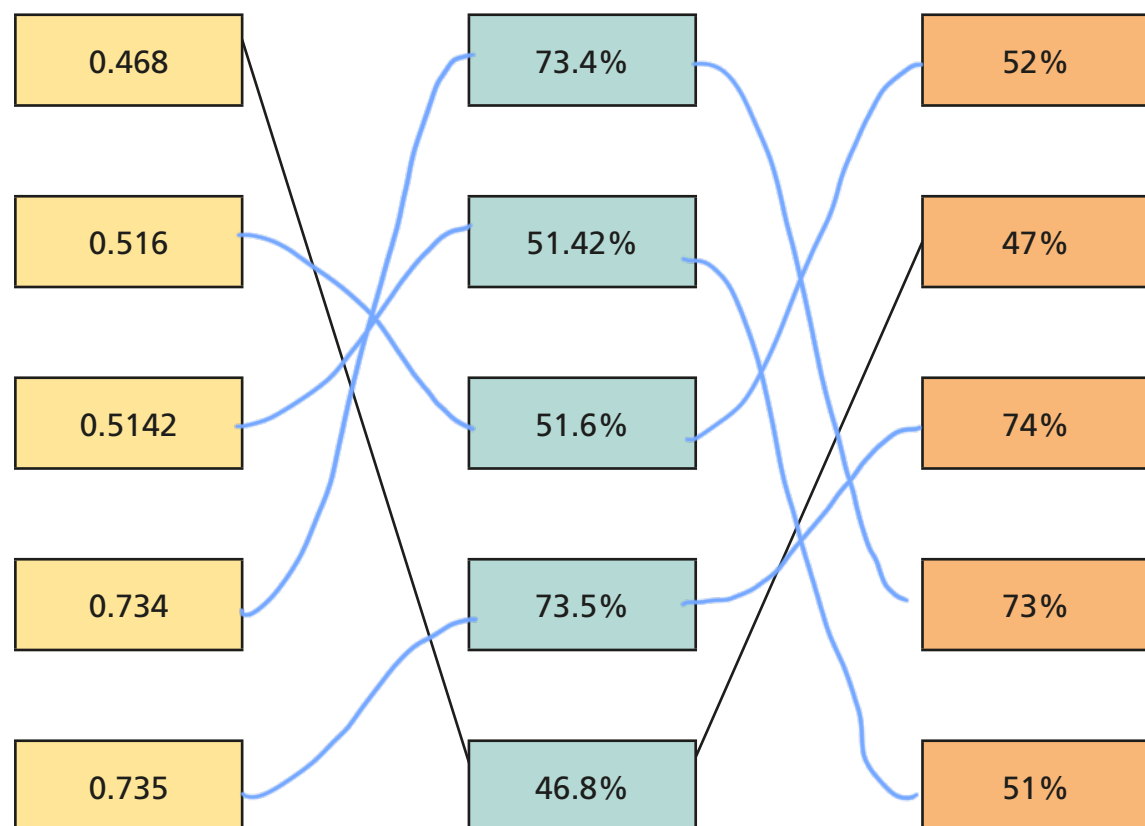


To convert a decimal to a percentage, you multiply it by 100 and add a % sign.

1 Round each number to the nearest integer.

18.1	18.15	18.5	18.55	18.155
18	18	19	19	18

2 Match the decimals, percentages and percentages rounded to the nearest integer. The first one has been done for you.



a) Explain to a partner why Dexter is correct.

b) Convert these decimals to percentages.

0.56	0.28	0.07	0.71	0.17
56%	28%	7%	71%	17%

c) Convert these decimals to percentages, giving your answers to the nearest whole per cent.

0.568	0.282	0.073	0.715	0.17487
57%	28%	7%	72%	17%

4

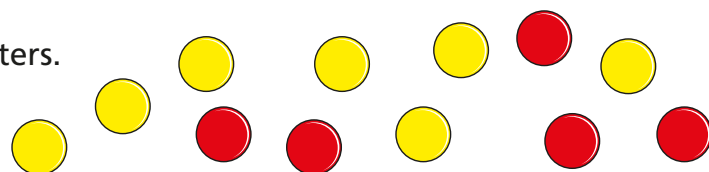
Complete the table.

The first row has been done for you.

Words	Fraction	Decimal	Percentage to the nearest whole
17 out of 40	$\frac{17}{40}$	$17 \div 40 = 0.425$	43%
31 out of 40	$\frac{31}{40}$	$31 \div 40 = 0.775$	78%
28 out of 30	$\frac{28}{30}$	$28 \div 30 = 0.933...$	93%
49 out of 80	$\frac{49}{80}$	$49 \div 80 = 0.6125$	61%
48 out of 75	$\frac{48}{75}$	$48 \div 75 = 0.64$	64%
49 out of 75	$\frac{49}{75}$	$49 \div 75 = 0.653...$	65%
50 out of 75	$\frac{50}{75}$	$50 \div 75 = 0.666...$	67%

5

Here are some counters.



a) What fraction of the counters are yellow?

$\frac{7}{12}$

b) What percentage of the counters are yellow?

58 %

c) What fraction of the counters are red?

$\frac{5}{12}$

d) What percentage of the counters are red?

42 %

6

Filip enters a 15 km charity race.

He runs 11 km and walks the remaining 4 km.

a) What fraction of the race does he run?

$\frac{11}{15}$

b) What percentage of the race does he run?

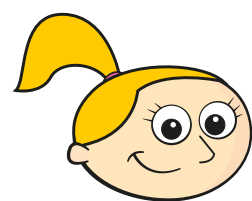
73 %

c) What fraction of the race does he walk?

$\frac{4}{15}$

d) What percentage of the race does he walk?

27 %



I worked out the percentage Filip walked without thinking of it as a fraction first.

e) Explain to a partner how Eva was able to do this.

7

Express the first quantity as a fraction and a percentage of the second quantity. Give your percentages to the nearest whole per cent.

a) 46 m, 80 m

$\frac{46}{80}$ 58 %

d) 7 hours, 1 day

$\frac{7}{24}$ 29 %

b) 40 kg, 75 kg

$\frac{40}{75}$ 53 %

e) 2 days, 1 week

$\frac{2}{7}$ 29 %

c) 165 g, $\frac{1}{2}$ kg

$\frac{165}{500}$ 33 %

f) 137 days, 1 leap year

$\frac{137}{366}$ 37 %

8

Here are the number of votes for each candidate in an election for a Year 8 school council representative.

Name	Votes
Esther	37
Aisha	41
Huan	36
Jack	38

a) How many students voted altogether?

152

b) What percentage of the votes did each candidate get?

Esther = 24 % Aisha = 27 %

Huan = 24 % Jack = 25 %

c) There are 185 students in Year 8
What percentage of them voted?

82 %