

TARGET To solve multi-step word problems.

Example

A bicycle frame weighs 12.75 kg.
Each wheel weighs 1.85 kg.
What is the total weight of the frame and the wheels?

$$1.85 \times 2 = 3.7$$

$$12.75 + 3.7 = 16.45$$

Answer

Total weight is 16.45 kg.



A

- 1 DVDs cost £9.50. Oscar takes advantage of a buy one and get another for half price offer. How much does he pay for two DVDs?
- 2 Malik buys three teas and one coffee for £5.40 altogether. Teas cost £1.25. What does the coffee cost?



- 3 A mobile library has 3268 books. During the week 1374 books are returned and 925 are borrowed. How many books does the library have now?
- 4 Flora has 1.5 litres of drink. She pours it equally into two jugs. 0.38 litres is used from one jug. How much drink is left in this jug?
- 5 A wire is 4 m long. 10% is cut off. The rest is cut into four equal lengths. How long is each of these four lengths?

B

- 1 T-shirts cost £4.35 each. Duane buys four for £12.79. How much has he saved?
- 2 Diana makes a muesli with 425 g of oat flakes, 220 g of nuts and 255 g of dried fruit. The mixture provides fifteen portions. How much muesli is in each portion?
- 3 A reel of cable is 62.8 m long. 27.26 m is cut off. A further 9.55 m is used. How much cable is left on the reel?
- 4 There is 0.65 litres of pasta sauce in a jar. There are 12 jars in a box. How much sauce is in six boxes?
- 5 The temperature is 2.6°C at midnight. It falls 3.9°C by dawn before rising 8.5°C by midday. What is the temperature at midday?
- 6 There are sixty questions in a test. Melvin gets 70% right. Miles gets five twelfths wrong. How many more questions does Melvin get right than Miles?

C

- 1 A painting has a length of 17.5 cm and a perimeter of 63 cm. What is its area?
- 2 Sadiq needs three planks 2.65 m long and twelve planks 3.4 m long. What is the total length of the planks he needs?
- 3 Claire has read four ninths of the 162 pages in her book. How many more pages will she have to read before she is two thirds of the way through the book?
- 4 Fish costs £6.80 per kilogram. Todd buys 550 g. How much change does he receive from £10?
- 5 Four cartons of fruit juice hold 0.74 litres altogether. How many litres of juice are needed for fifty cartons?
- 6 One 16.5 kg bag of dog food feeds three corgis for a week. How many kilograms of dog food are needed to feed the 72 corgis in a kennel for a week?

C

- 1 a) 1, 2, 4 b) 4 9 divisible by 11, etc.
 2 a) 1, 3, 5, 15, 25, 75 b) 75 10 divisible by 13, etc.
 3 a) 1, 2, 4, 8, 16 b) 16 11 divisible by 3, etc.
 4 a) 1, 3 b) 3 12 divisible by 19, etc.
 5 a) 1, 2, 4, 8 b) 8 13 101, 103, 107, 109
 6 a) 1, 2, 3, 6, 9, 18 b) 18 14 131, 137, 139
 7 a) 1, 2, 3, 6 b) 6 15 151, 157
 8 a) 1, 3, 9 b) 9 16 191, 193, 197, 199

- 17 $2 \times 2 \times 2 \times 5 \times 5$ 21 $2 \times 7 \times 13$
 18 $2 \times 2 \times 2 \times 2 \times 3 \times 3$ 22 $3 \times 5 \times 5 \times 5$
 19 $2 \times 3 \times 3 \times 3 \times 3$ 23 $2 \times 2 \times 3 \times 3 \times 7$
 20 $2 \times 2 \times 2 \times 3 \times 11$ 24 $2 \times 2 \times 2 \times 5 \times 11$

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A

- 1 11 5 9 9 36 13 65
 2 7 6 8 10 25 14 7
 3 26 7 56 11 27 15 9
 4 23 8 43 12 32 16 0

B

- 1 510 5 33 9 37 13 4
 2 40 6 25 10 32 14 60
 3 7 7 13 11 1230 15 116
 4 22 8 6 12 9 16 4.5

C

- 1 31 3 18 5 42 7 50
 2 18 4 16 6 0 8 33
 9 $10 \times (2 + 6) = 80$ 13 $20 + (25 - 10) \div 5 = 23$
 10 $(16 - 10) \div 2 = 3$ 14 $(17 - 2) \times (6 + 4) = 150$
 11 $(11 - 5) \times (7 + 2) = 54$ 15 $60 \div (4 + 8) - 3 = 2$
 12 $9 + 6 \div (3 - 1) = 12$ 16 $9 + (15 - 9) \times 3 = 27$

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A

- 1 20 6 15 11 20 16 48
 2 30 7 15 12 38 17 13
 3 1 8 75 13 99 18 5
 4 12 9 2 14 43
 5 9 10 32 15 3

B

- 1 $3 \times (8 - 5) = 9$ 9 $7 \times (6 + 2) = 56$
 2 $(8 + 12) \div 4 = 5$ 10 $(100 \div 20) \times 2 = 10$
 3 $(60 \div 10) - 4 = 2$ 11 $9 + (6 \div 3) = 11$
 4 $36 - (9 \times 2) = 18$ 12 $(3 \times 7) - 3 = 18$
 5 $48 \div (4 \times 3) = 4$ 13 $(8 - 4) \times 2 = 8$
 6 $(3 + 4) \times 5 = 35$ 14 $84 \div (12 - 5) = 12$
 7 $(20 \div 4) + 1 = 6$ 15 $6 \times (5 + 2) = 42$
 8 $(48 - 15) \div 3 = 11$

C

- 1 $11 - (3 \times 2) = 90 \div (15 + 3)$
 2 $(28 + 12) \div 4 = 2 \times (9 - 4)$
 3 $5 \times (5 + 3) = 1000 \div (20 + 5)$
 4 $64 \div (8 - 4) = (3 \times 5) + 1$
 5 $104 - (56 \div 4) = (42 - 12) \times 3$
 6 $(18 + 6) \times 6 = (8 \times 20) - 16$
 7 $14 \times (5 - 3) = 10 + (36 \div 2)$
 8 $75 \div (3 \times 5) = (100 \div 10) - 5$
 9 $(23 - 7) \times 2 = 8 \times (6 - 2)$
 10 $(36 + 36) \div 9 = 24 - (8 \times 2)$

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A

- 1 29
 2 23
 3 340
 4 £4550
 5 1-12 m

B

- 1 53
 2 96
 3 £32.40
 4 Saturday 7567, Sunday 5688
 5 148.72 km

C

- 1 £5547.60
 2 2220 miles
 3 273
 4 30.4 cm^2
 5 £835

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A

- 1 £14.25
 2 £1.65
 3 3717
 4 0.37 litres
 5 90 cm

B

- 1 £4.61
 2 60 g
 3 25.99 m
 4 46.8 litres
 5 7.2°C
 6 7

C

- 1 245 cm^2
 2 48.75 m
 3 36
 4 £6.26
 5 9.25 litres
 6 396 kg

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A

- 1 $\frac{3}{6} \frac{1}{2}$ 3 $\frac{8}{10} \frac{4}{5}$ 5 $\frac{1}{2}$ 7 $\frac{3}{4}$ 9 $\frac{2}{3}$
 2 $\frac{6}{8} \frac{3}{4}$ 4 $\frac{4}{12} \frac{1}{3}$ 6 $\frac{1}{3}$ 8 $\frac{2}{5}$ 10 $\frac{1}{2}$

B

- 1 $\frac{1}{5}$ 5 $\frac{2}{3}$ 9 $\frac{4}{5}$ 13 $\frac{1}{4}$ 17 $\frac{5}{6}$
 2 $\frac{3}{4}$ 6 $\frac{5}{6}$ 10 $\frac{1}{3}$ 14 $\frac{7}{10}$ 18 $\frac{4}{5}$
 3 $\frac{1}{4}$ 7 $\frac{2}{5}$ 11 $\frac{2}{5}$ 15 $\frac{2}{3}$ 19 $\frac{1}{3}$
 4 $\frac{1}{2}$ 8 $\frac{1}{3}$ 12 $\frac{2}{3}$ 16 $\frac{3}{4}$ 20 $\frac{2}{3}$

C

- 1 $\frac{1}{4}$ 7 $\frac{3}{5}$ 13 $\frac{5}{6}$ 19 $\frac{7}{8}$ 25 >
 2 $\frac{3}{10}$ 8 $\frac{11}{25}$ 14 $\frac{7}{12}$ 20 $\frac{4}{9}$ 26 <
 3 $\frac{3}{4}$ 9 $\frac{2}{3}$ 15 $\frac{3}{5}$ 21 <
 4 $\frac{1}{3}$ 10 $\frac{5}{9}$ 16 $\frac{7}{10}$ 22 =
 5 $\frac{17}{20}$ 11 $\frac{2}{5}$ 17 $\frac{5}{16}$ 23 >
 6 $\frac{7}{8}$ 12 $\frac{4}{5}$ 18 $\frac{2}{3}$ 24 <

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A

- 1 $\frac{1}{2}$ 4 $\frac{1}{4}$ 7 $\frac{1}{6}$ 10 $\frac{2}{3}$ 13 $\frac{2}{3}$
 2 $\frac{1}{4}$ 5 $\frac{1}{5}$ 8 $\frac{1}{3}$ 11 $\frac{3}{4}$ 14 $\frac{3}{4}$
 3 $\frac{1}{3}$ 6 $\frac{3}{5}$ 9 $\frac{1}{4}$ 12 $\frac{1}{2}$

B

- 1 a) $\frac{1}{8}$ b) $\frac{3}{8}$ c) $\frac{1}{3}$ d) $\frac{2}{3}$
 2 a) $\frac{1}{5}$ b) $\frac{4}{5}$ c) $\frac{1}{6}$ d) $\frac{5}{6}$
 3 $\frac{1}{4}$ 7 $\frac{9}{10}$ 11 $\frac{1}{2}$ 15 $\frac{3}{5}$
 4 $\frac{2}{3}$ 8 $\frac{1}{3}$ 12 $\frac{5}{6}$ 16 $\frac{7}{10}$
 5 $\frac{1}{2}$ 9 $\frac{1}{8}$ 13 $\frac{3}{4}$ 17 $\frac{3}{10}$
 6 $\frac{2}{5}$ 10 $\frac{2}{3}$ 14 $\frac{3}{4}$ 18 $\frac{4}{5}$

C

- 1 a) $\frac{1}{10}$ 2 a) $\frac{1}{10}$ 3 a) $\frac{1}{5}$ 4 a) $\frac{1}{20}$ 5 a) $\frac{1}{20}$ 6 $\frac{5}{8}$
 b) $\frac{7}{10}$ b) $\frac{1}{20}$ b) $\frac{1}{9}$ b) $\frac{19}{20}$ b) $\frac{13}{20}$ 7 $\frac{13}{20}$
 c) $\frac{1}{4}$ c) $\frac{1}{8}$ c) $\frac{3}{5}$ c) $\frac{1}{5}$ c) $\frac{1}{40}$ 8 $\frac{2}{5}$
 d) $\frac{3}{4}$ d) $\frac{5}{8}$ d) $\frac{4}{9}$ d) $\frac{4}{5}$ d) $\frac{7}{40}$