

GCSE Maths: Units of measure, time and money (Higher): answers

GCSE Maths - Number Basics - Higher - Lesson 1.8

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/gcse/maths/ch01-number-basics/higher/units-of-measure-time-and-money/

Exercise 1J Units, time and money Non-calculator

1 Change these lengths.

(a) 3.5 m to cm

Answer: 350 cm

(b) 450 cm to m

Answer: 4.5 m

(c) 2.4 km to m

Answer: 2400 m

(d) 7500 m to km

Answer: 7.5 km

(e) 85 mm to cm

Answer: 8.5 cm

(f) 0.6 m to mm

Answer: 600 mm

2 Change these masses and capacities.

(a) 2.5 kg to g

Answer: 2500 g

(b) 3400 g to kg

Answer: 3.4 kg

(c) 0.75 litres to ml

Answer: 750 ml

(d) 2500 ml to litres

Answer: 2.5 litres

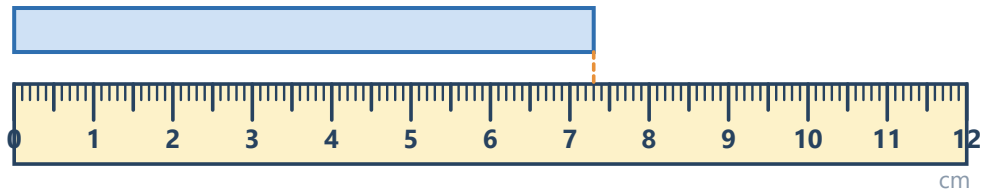
(e) 4.2 tonnes to kg

Answer: 4200 kg

(f) 650 g to kg

Answer: 0.65 kg

3 The ruler shows the length of a pencil.



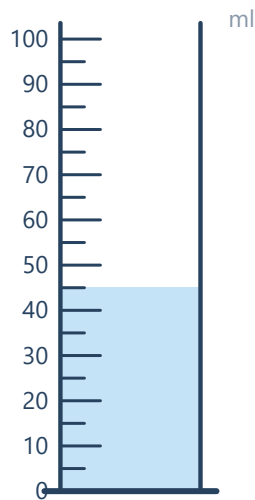
- (a) Write down the length of the pencil in millimetres.

Answer: 73 mm

- (b) Write the length in centimetres.

Answer: 7.3 cm

- 4 The diagram shows the liquid in a measuring cylinder.



- (a) Work out the value of each small division on the scale.

Answer: 5 ml

- (b) Write down the volume of liquid in the cylinder.

Answer: 45 ml

- 5 Write each time using the 24-hour clock.

- (a) 7:05 pm

Answer: 19:05

- (b) 12:30 am

Answer: 00:30

- (c) 9:45 am

Answer: 09:45

- (d) 11:20 pm

Answer: 23:20

- 6 Write each time using the 12-hour clock, with am or pm.

(a) 15:40

Answer: 3:40 pm

(b) 00:10

Answer: 12:10 am

(c) 12:25

Answer: 12:25 pm

(d) 21:05

Answer: 9:05 pm

7 Work out how long each journey takes.

(a) Leaves 09:45, arrives 13:20

Answer: 3 hours 35 minutes

(b) Leaves 10:00, arrives 12:35

Answer: 2 hours 35 minutes

(c) Leaves 14:50, arrives 17:15

Answer: 2 hours 25 minutes

(d) Leaves 06:35, arrives 11:10

Answer: 4 hours 35 minutes

8 Work out the finishing time of each activity.

(a) Starts 08:50 and lasts 2 hours 25 minutes

Answer: 11:15

(b) Starts 14:35 and lasts 1 hour 50 minutes

Answer: 16:25

(c) Starts 22:50 and lasts 2 hours 25 minutes

Answer: 01:15 the next day

9 At a café, tea costs £1.85, a sandwich costs £3.60 and a cake costs £2.45.

(a) Work out the total cost of one tea, one sandwich and one cake.

Answer: £7.90

(b) Maya pays with a £10 note. Work out her change.

Answer: £2.10

10 A recipe uses 750 g of flour. Ali has 2.4 kg of flour. How many whole batches can he make?

Answer: 3 batches

11 A bus leaves at 14:25. The journey takes 1 hour 50 minutes. Jo has a meeting that starts at 16:30. Does she arrive before the meeting starts?

Answer: Yes. The bus arrives at 16:15

12 Change these times into hours and minutes, or minutes into hours.

(a) 2.25 hours

Answer: 2 hours 15 minutes

(b) 3.5 hours

Answer: 3 hours 30 minutes

(c) 0.2 hours

Answer: 12 minutes

(d) 45 minutes into hours

Answer: 0.75 hours

13 Which is longer, 0.9 km or 950 m? Show how you decide.

Answer: 950 m is longer

14 Mia says that 2.3 hours is 2 hours 30 minutes. Is she correct? Show your working.

Answer: No. 2.3 hours is 2 hours 18 minutes

15 A cyclist rides 24 km in 1 hour 30 minutes. Work out her average speed in km/h.

Answer: 16 km/h

16 A runner goes at 5 metres per second. Work out her speed in kilometres per hour.

Answer: 18 km/h

17 Gravel costs £42 per tonne. Work out the cost of 250 kg of gravel.

Answer: £10.50

18 Show that a speed of 36 km/h is the same as 10 m/s.

Answer: $36 \text{ km/h} = 10 \text{ m/s}$