

Name:

Exam Style Questions

Converting between Metric and Imperial Units



Corbettmaths

Equipment needed: Ruler, Pencil, Calculator and Pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Videos 349d, 349e, 349f



Answers and Video Solutions



1. You are given that



$$5 \text{ miles} = 8 \text{ kilometres.}$$

(a) Convert 20 miles into kilometres.

.....km
(2)

(b) Convert 24 kilometres into miles.

.....miles
(2)

2. Change 80 miles into kilometres.



You may use

$$5 \text{ miles} = 8 \text{ kilometres}$$

.....km
(2)

3. Here is a conversion table for miles and kilometres.



| Miles | Kilometres |
|-------|------------|
| 1 | 1.6 |
| 5 | 8 |
| 10 | 16 |
| 20 | 32 |

(a) Use the table to convert 100 miles to kilometres.

.....km
(1)

(b) Use the table to convert 36 miles to kilometres.

.....km
(2)

4. Karen is driving through Spain and sees the sign below.



This is the speed limit in kilometres per hour.

What is the speed limit in miles per hour?

Use 5 miles = 8 km

.....miles per hour
(2)

5. Gina cycles a distance of 20 miles.
Wendy cycles a distance of 30 kilometres.



Use 5 miles = 8 km

Who travels further?

.....
(3)

6. On Saturday Martin drives for 6 hours.
His average speed is 35 mph.



(a) How far does Martin drive on Saturday?

.....miles
(2)

On Sunday Martin drives 320 km.

1 mile = 1.6 km

(b) On which day does Martin drive further?

.....
(3)

7. Omar has 6 pints of milk.



How many litres is this?

You may use

1 pint = 568ml

.....litres
(2)

8. A table is 127cm long.



How many inches is this?

You may use

1 inch = 2.54cm

.....inches
(2)

9. A weight disc weighs 15kg.



How many pounds is this?

You may use

1 kilogram = 2.2 pounds

.....pounds
(2)

10. Given that 2 gallons = 9 litres,



convert 11 gallons into litres.

.....litres
(3)

11. Timothy is making a cake.



The recipe says he needs 825 grams of sugar.

Timothy has 3 pounds of sugar.

You may use
1 pound = 454 grams

How much sugar should Timothy have left after making the cake?

.....g
(2)

12. A tank holds 80 litres of fuel.



How many pints is this?

You may use
1 pint = 0.568 litres

.....pints
(2)

13. Change 6 foot 2 inches into metres.



You may use

1 foot = 12 inches

1 inch = 2.54cm

.....m

(3)

14. Change 22 stone into kilograms



You may use

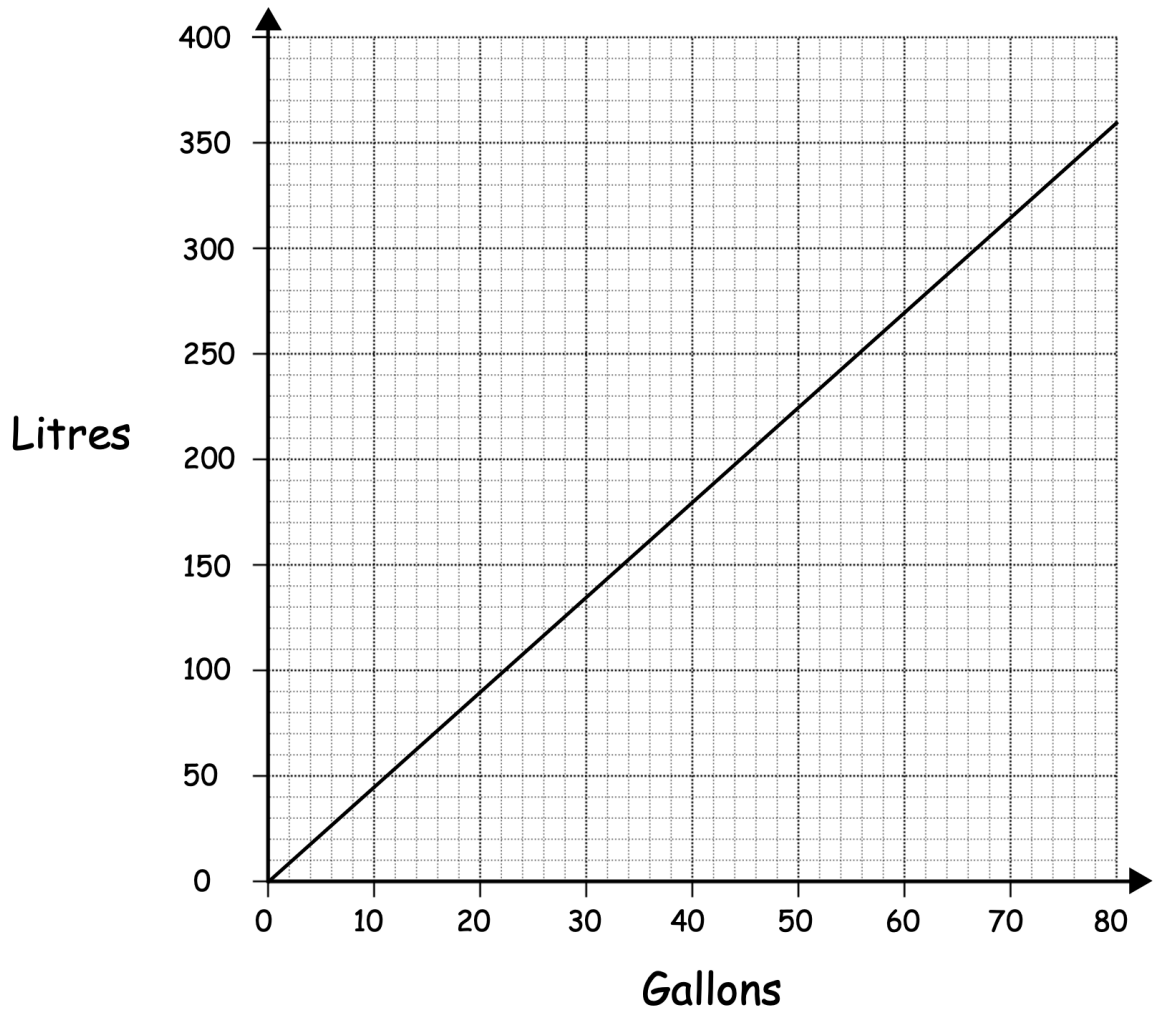
1 kilogram = 2.2 pounds

1 stone = 14 pounds

.....kg

(3)

15. This graph below can be used to change between gallons and litres.



(a) Use the graph to change 40 gallons into litres.

.....litres
(1)

Kyle orders 200 gallons of heating oil.

(b) Change 200 gallons into litres.

.....litres
(1)

16. Hannah is 5 foot tall.
Natalie is 1.46 metres tall.
Kelly is 154 centimetres tall.



Arrange the girls in order of height.
Start with the shortest.

You may use
1 foot = 12 inches
1 inch = 2.54cm

.....
(3)

17. (a) Work out how many centimetres are in 1 mile.



You may use
1 mile = 5280 feet
1 foot = 12 inches
1 inch = 2.54cm

.....
(2)

- (b) Work out how many millilitres are in 1 gallon.

You may use
1 gallon = 4.5 litres

.....
(1)

18. An elevator has a weight limit of 600kg.



Six American footballers enter the elevator.

- Sam weighs 230 pounds.
- Harry weighs 217 pounds.
- Aaron weighs 225 pounds.
- Tom weighs 225 pounds.
- Larry weighs 215 pounds.
- Steve weighs 228 pounds.

You may use

$$1 \text{ kg} = 2.2 \text{ pounds}$$

Should all six American footballers use the elevator?

(4)

19.



70 litres



125 pints



20 gallons

You may use

$$8 \text{ pints} = 1 \text{ gallon}$$

$$1 \text{ litre} = 1.75 \text{ pints}$$

Starting with the smallest, arrange the oil drums in order of capacity.

.....

(3)

20. A table is 150 cm long.



(a) Change 150 cm into inches.

You may use

1 inch = 2.54 centimetres

.....inches
(1)

A vase holds 7 pints of water.

(b) Change 7 pints into litres.

You may use

1 pint = 0.568 litres

.....litres
(1)

21. A book weighs 3.3 pounds.



(a) Change 3.3 pounds into kilograms.

You may use

1 kilogram = 2.2 pounds

.....kg
(1)

Distance between two towns is 24km.

(b) Change 24 km into miles.

You may use

5 miles = 8 kilometres

.....miles
(1)

22. A can contains 330ml of fizzy cola.



Convert 330ml to fluid ounces.
Give your answer to 2 decimal places.

You may use

1 fluid ounce = 28.4 millilitres

.....fluid ounces
(2)

23. Pierre is driving through Wales and see this road sign.



| | |
|----------|-----------|
| Cardiff | 16 miles |
| Swansea | 70 miles |
| Holyhead | 225 miles |

He is going to drive to Holyhead.
Pierre hopes to drive at an average speed of 80 km/h.
He leaves at 06:45.

You may use

5 miles = 8 kilometres

Work out what time Pierre should arrive in Holyhead.

.....
(5)

24. Given that



1 gallon = 8 pints

and

1 litre = 1.76 pints

Convert 15 gallons to litres.

.....litres

(3)

25. A car is advertised as driving 45 miles per gallon.



The car holds 50 litres of petrol.

How far should the car travel on one tank of petrol?

You may use

1 gallon = 4.5 litres

.....miles

(3)

26. Ronan drives between two cities that are 240 miles apart.



His car uses diesel at the rate of 36 miles per gallon.

Ronan bought the diesel at £1.39 per litre.

How much did Ronan spend on diesel for the journey?

You may use

1 gallon = 4.5 litres

.....
(4)

27. A leisure centre wants to use a pump to empty the water from their swimming pool.



The pool holds 130,000 gallons of water.

Pump 1 can remove the water at a rate of 2500 gallons per hour

Pump 2 can remove the water at a rate of 180 litres per minute.

How much quicker is pump 1 than pump 2 to empty the pool?
Give your answer to the nearest minute.

You may use
1 gallon = 4.5461 litres

..... hoursminutes
(4)