

Name:

Exam Style Questions

Cost per Litre



Corbettmaths

Equipment needed: Calculator, 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

Video 4001



Answers and Video Solutions



4. Diesel costs £1.59 per litre.
Laurie spends £30 buying diesel.



How many litres of diesel does she buy?
Give your answer to 2 decimal places.

$$30 \div 1.59 = 18.8679... \text{ litres}$$

18.87 litres

18.87 litres
(2)

5. A 75ml bottle of perfume costs £60



Work out the cost per litre of the perfume.

$$\begin{array}{l} \div 3 \swarrow \quad 75 \text{ ml} = \text{£}60 \\ \quad \quad \quad 25 \text{ ml} = \text{£}20 \quad \searrow \div 3 \end{array}$$

$$100 \text{ ml} = \text{£}80$$

$$1000 \text{ ml} = \text{£}800$$

£800
(2)

6. Thomas hires a car while on holiday.



The car costs £80 per day.
He is also charged £2.05 for each litre of petrol used.

Thomas hires the car for 4 days and uses 36 litres of petrol.

Work out how much the car cost Thomas to hire.

$$36 \times 2.05 = £73.80$$

$$£80 \times 4 = £320$$

$$£320 + £73.80 = £393.80$$

£393.80

.....
(3)

7. Áine is buying heating oil.



Her oil tank can hold 1200 litres of heating oil.
The tank is 30% full.
Áine orders enough heating oil to fill the tank.

The heating oil costs 74p per litre.

Work out the cost of filling the tank.

$$10\% \text{ of } 1200 = 120 \text{ litres}$$

$$30\% \text{ of } 1200 = 360 \text{ litres}$$

$$1200 - 360 = 840 \text{ litres}$$

$$840 \times 0.74 = £621.60$$

£621.60

.....
(4)

8. Ellie drives her car to visit her patients.



Ellie's car travels 8 miles per litre of petrol used.
She paid £1.58 per litre for the petrol.

This month, Ellie has driven 420 miles visiting patients.

(a) Work out how much the petrol cost to drive 420 miles.

$$420 \div 8 = 52.5 \text{ litres}$$

$$1.58 \times 52.5 = £82.95$$

$$\begin{array}{r} £82.95 \\ \hline \end{array} \quad (3)$$

She is paid 45p per mile by her employer to cover the cost of petrol and car repairs.

(b) How much money is left for car repairs?

$$420 \times 0.45 = £189$$

$$189 - 82.95 = £106.05$$

$$\begin{array}{r} £106.05 \\ \hline \end{array} \quad (2)$$

9. A car fuel tank can hold 16 gallons of diesel.



The empty tank is filled with diesel that costs 154.9p per litre.
1 litre = 0.22 gallons.

Work out how much it will cost to fill the tank with diesel.
Give your answer to the nearest penny.

$$16 \div 0.22 = 72.7272... \text{ litres}$$

$$72.7272... \times 154.9 = 11265.454... \text{ p}$$
$$\text{£}112.65$$

£112.65

10. Orange juice costs £1.60 per litre.



Lemonade costs 90p per litre.

The orange juice and the lemonade are mixed in the ratio 1 : 4 to make a fizzy orange drink.

$$1 + 4 = 5$$

Work out the cost of making 12 litres of the fizzy orange drink.

$$12 \div 5 = 2.4$$

$$1 \times 2.4 = 2.4 \text{ litres of orange juice}$$

$$4 \times 2.4 = 9.6 \text{ litres of lemonade}$$

$$2.4 \times \text{£}1.60 = \text{£}3.84$$

$$9.6 \times \text{£}0.90 = \text{£}8.64$$

$$\text{£}12.48$$

£12.48

(4)

11. Each day that Jacob works, he drives to the office and back.
Jacob lives 18 miles from the office.



Jacob works 20 days in June.

Given that

His car travels 48.2 miles for each gallon of fuel used.

The fuel costs £1.70 per litre.

1 gallon = 4.55 litres.

Work out the cost of the fuel used in June.

Give your answer to the nearest penny.

$$18 \times 2 = 36$$

$$36 \times 20 = 720 \text{ miles}$$

$$720 \div 48.2 = 14.9377... \text{ gallons}$$

$$14.9377... \times 4.55 = 67.9668... \text{ litres}$$

$$67.9668... \times 1.70 = £115.543...$$

£115.54

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(5)