

Name:

Exam Style Questions

Cost per Metre



Equipment needed: Pen, Calculator

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 400m



Answers and Video Solutions



1. String costs 40p per metre.



Work out the cost of 6 metres of string.

$$6 \times 40 = 240$$

$$£2.40$$

$$£2.40$$

(2)

-
2. Adil wants to buy 14 metres of ribbon.



The ribbon costs £1.79 per metre.

Work out the total cost of the ribbon.

$$14 \times 1.79 = £25.06$$

$$£25.06$$

(2)

-
3. Henry bought 12 metres of guttering for £78.72



Work out the cost per metre for the guttering.

$$78.72 \div 12 = £6.56$$

$$£6.56$$

(2)

4. Electrical wire costs £3 per metre.



Sonny bought some electrical wire and paid £49.50

How much electrical wire did Sonny buy?

$$\begin{array}{r} 16.50 \\ 3 \overline{) 49.50} \end{array}$$

16.5

.....m
(2)

5. Harris bought the following items from a shop.



5 metres of fabric at £4.75 per metre.

3 packets of felt pens at £6 each.

4 bottles of PVA glue at £4.50 each.

Work out the total price of the items.

$$\begin{array}{r} 4.75 \times 5 = £ 23.75 \\ 3 \times 6 = £ 18 \\ 4 \times 4.50 = £ 18 \\ \hline £ 59.75 \end{array}$$

£59.75

.....
(3)

6. Deborah is putting up a fence.



The fence costs £18.25 per metre.

Deborah bought 24 metres of fencing and 25 fence posts.

The total cost was £863

Work out the price of each fence post.

$$24 \times 18.25 = 438$$

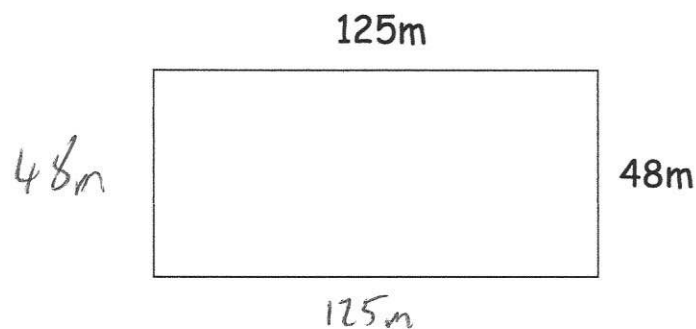
$$863 - 438 = 425$$

$$425 \div 25 = 17$$

£17

(3)

7. Barry has a rectangular field.



The fence costs £18.74 per metre.

Work out the total cost for the fence.

$$125 + 125 + 48 + 48 = 346$$

$$346 \times 18.74 = 6484.04$$

£6484.04

(3)

8. Mr Richards pays to get some guttering installed on his shed.



The guttering costs £5.50 per metre.
He is charged £18 per hour for the work.

A total of 20m of guttering is used.
It takes two hours for the guttering to be installed.

Work out the total cost.

$$5.50 \times 20$$

$$110 + 36 = 146$$

$$5.50 \times 10 = 55$$

$$5.50 \times 20 = £110$$

$$2 \times 18 = 36$$

£146

(3)

9. Carolyn bought 4 old chairs for £14



She 2.4m of cloth at £13 per metre to recover the seat cushions

Carolyn sold the chairs for £49 each.

Work out how much profit Carolyn made.

$$2.4 \times 13 = £31.20$$

$$\begin{array}{r} + 14 \\ \hline £45.20 \end{array}$$

$$49 \times 4 = 196$$

$$196 - 45.20 = £150.80$$

£150.80

(3)

10. Bill and Janet take part in a Swimathon.



Mrs Kelly gave them the same amount of money for each metre swam.

Bill swam 400m and Mrs Kelly gave him £16

Mrs Kelly gave Janet £52

How far did Janet swim?

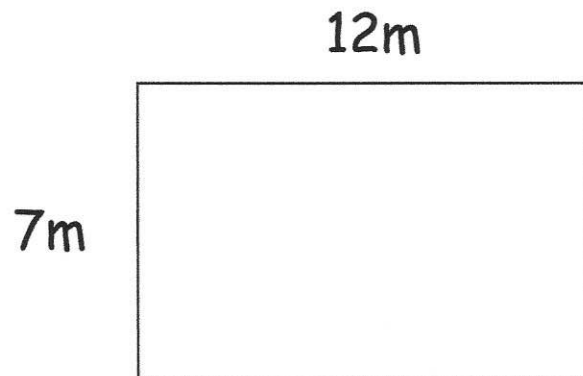
$$1600 \div 400 = 4p \text{ per metre}$$

$$5200 \div 4 = 1300 \text{ m}$$

$$4 \overline{) 5200} \begin{array}{r} 1300 \\ \underline{4} \\ 12 \\ \underline{12} \\ 00 \\ \underline{00} \\ 00 \end{array}$$

$$\begin{array}{r} 1.3\text{km} \\ \hline \text{or} \\ 1300 \text{ m} \end{array} \quad (3)$$

11. Roisin has a rectangular garden.



She wants to lay turf and put a fence around the garden.

The turf costs £7.25 per square square.

The fence costs £15 per metre.

Work out the total cost of the turf and the fence.

Turf

$$7 \times 12 = 84 \text{ m}^2$$

$$84 \times 7.25 = \text{£}609$$

Fence

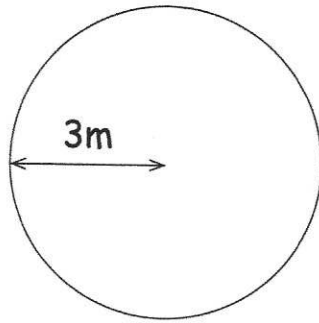
$$12 + 7 + 12 + 7 = 38 \text{ m}$$

$$38 \times 15 = \text{£}570$$

$$609 + 570 = 1179$$

$$\begin{array}{r} \text{£}1179 \\ \hline (5) \end{array}$$

12. Alannah has a circular pond with radius 3m.



Alannah puts a fence around the pond.
Each metre of fencing cost £5.95 per metre.

Work out the total cost of the fence.

$$\begin{aligned} C &= \pi \times d \\ &= \pi \times 6 \\ &= 18.8495\dots \text{ m} \end{aligned}$$

$$\begin{aligned} 18.8495\dots \times 5.95 &= \text{£}112.15 \\ &\text{(or £}112.16\text{)} \end{aligned}$$

or

$$\begin{aligned} C &= \pi \times d \\ &= \pi \times 6 \\ &= 18.849\dots \text{ m} \end{aligned}$$

$$19 \times 5.95 = \text{£}113.05$$

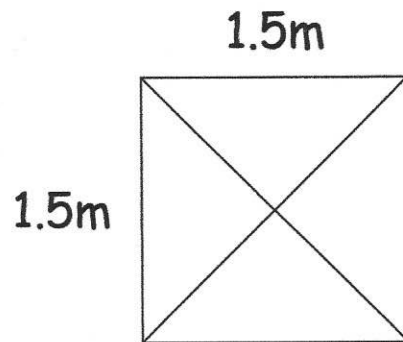
$$\text{£}112.15 \text{ or } \text{£}113.05$$

.....
(3)

13. Jonah is making a metal gate for the side of his house.



The gate is a square with two diagonal supports.



Jonah will buy one piece of metal and cut it into the 6 pieces he needs.

The metal costs £35.80 per metre.

The metal can be bought in 10cm intervals.

Work out the total cost for the metal needed for the gate.

diagonal

$$x^2 = 1.5^2 + 1.5^2$$

$$x^2 = 4.5$$

$$x = 2.12132 \dots$$

metal needed

$$1.5 + 1.5 + 1.5 + 1.5 + 2.12132 \dots + 2.12132 \dots$$

$$= 10.242 \dots \text{ m}$$

$$\underline{\underline{\pounds 368.74}}$$

(6)

Buy

$$10.3 \text{ m}$$

$$10.3 \times \pounds 35.80 = \pounds 368.74$$