

Test 16

You have 10 minutes to complete this test.

You have 10 questions to complete within the given time.



Circle the letter next to the correct answer.

- ① The diameter of the circle in Figure A is 10 cm. Point C is the centre of the circle and a corner of the shaded square.

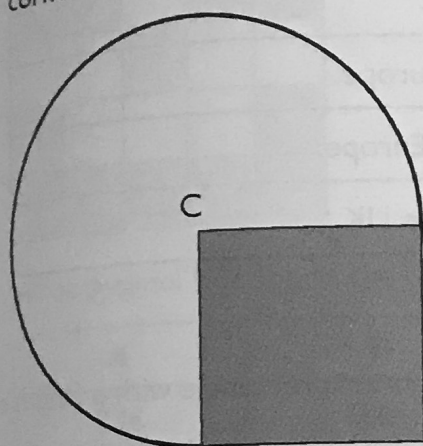


Figure A

What is the area of the shaded square?

A	B	C	D	E
100 cm ²	16 cm ²	25 cm ²	15 cm ²	4 cm ²

- ② Gabriel is 1.02 m tall. Which of the following is equivalent to Gabriel's height?

A	B	C	D	E
102 mm	1020 cm	1 m + 20 cm	1 m + 20 mm	1 m + 2 mm

- ③ Which of the following shows the ratio of 1.5 days to 5 weeks?

A	B	C	D	E
3:70	1:70	3:10	1:40	1:20

Questions continue on next page

- 4 This table shows how to convert women's clothes sizes from different regions.

UK	USA	Europe
8	4	36
10	6	38
12	8	40
14	10	42
16	12	44
18	14	46

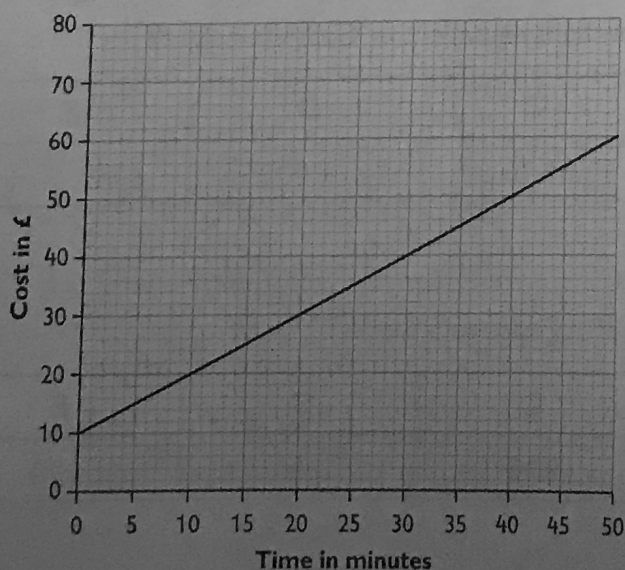
Which of these statements is FALSE?

A	The European sizes shown are always 2-digit numbers.
B	The maximum size shown for the USA is 14.
C	Size 8 in the UK corresponds to size 34 in Europe.
D	Size 10 in the USA is the same as size 42 in Europe.
E	Size 40 in Europe is the same as size 12 in the UK.

- 5 What is the side length of a square that has the same area as a rectangle with a length of 27 cm and a width of 3 cm?

A	B	C	D	E
9 cm	4 cm	81 cm	20 cm	12 cm

- 6 This graph shows the cost of hiring a boiler engineer.



How much does it cost to hire a boiler engineer for 1 hour?

A	B	C	D	E
£10	£50	£45	£80	£70

- 7 In a basket of berries, 12 are strawberries, 8 are blueberries and the rest are raspberries. If half of the berries in the basket are strawberries, how many raspberries are there in the basket?

A	B	C	D	E
2	10	4	1	3

- 8 This grid is formed from identical small squares.



What decimal fraction of the grid is shaded?

A	B	C	D	E
0.16	0.64	0.3	0.25	0.12

- 9 If $y = \frac{1}{2}$, what is the value of $\frac{7}{y}$?

A	B	C	D	E
7	$\frac{1}{14}$	14	$\frac{1}{7}$	28

- 10 The weights and prices of an Easter egg and a bar of chocolate are shown below.

<p>Easter egg</p> <p>150 g</p> <p>£3.50</p>	<p>Chocolate bar</p> <p>30 g 79p</p>
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Jack buys 5 bars of chocolate and an Easter egg.

How much does he pay in total?

A	B	C	D	E
£7.45	£4.80	£3.50	£3.95	£7.50

Score: / 10