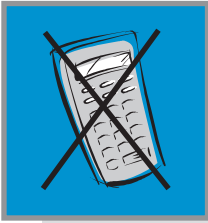


Test 1: Non-calculator



Instructions

- A correct answer scores 1 mark, and an incorrect answer scores 0.
- Marks are not deducted for incorrect answers.
- No marks are given if more than one answer alternative is shaded.
- Choose the alternative which most correctly answers the question and shade in the box next to it.

QUESTION 1

What is the number fifty-five thousand and twenty?

☐ 5520

☐ 550 020

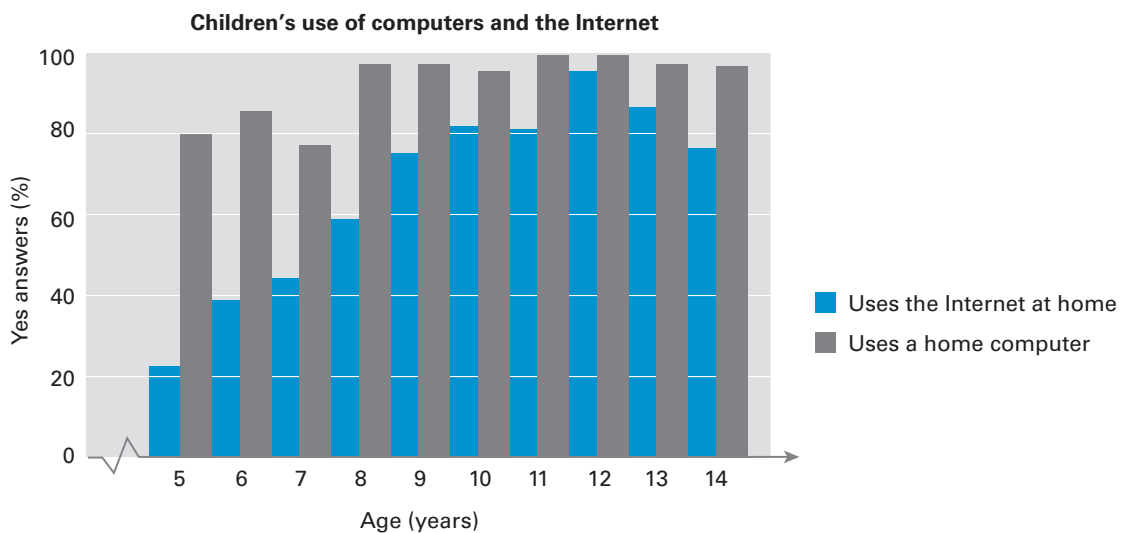
☒ 55 020

☐ 5 500 020

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QUESTION 2

The column graph below shows information about children's use of the Internet.



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Which of the following statements is correct?

- ☐ More than 70% of 8 year olds use the Internet at home.
- ☒ Almost all children over 8 years have a home computer.
- ☐ More than 80% of 14 year olds use the Internet at home.
- ☐ More than 90% of 7 year olds have a home computer.

QUESTION 3

Write 15.75 cm as metres.

0.1575 m



WRITE YOUR OWN ANSWER

QUESTION 4

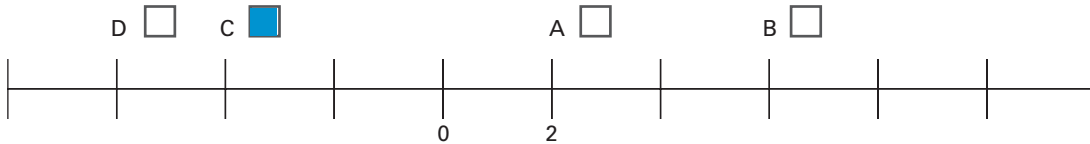
What can $2p + 3q + 4p + 6q - p$ be written as?

☒ $5p + 9q$ ☐ $14pq$ ☐ $13pq$ ☐ $6p + 9q$

SHADE ONE BOX

**QUESTION 5**

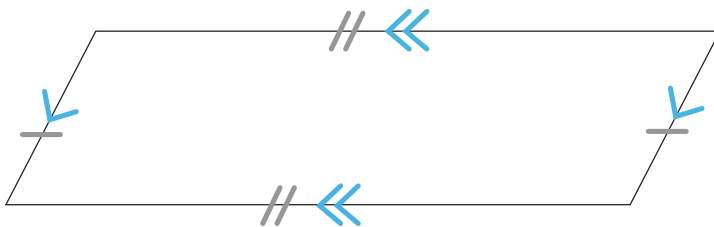
Which letter on the number line represents -4?



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**QUESTION 6**

What is the best name for this shape?

☐ rhombus☐ trapezium☐ kite☒ parallelogram

SHADE ONE BOX

**QUESTION 7**

Jacob has several socks in his drawer. Five are black, two are white and three are blue. What is the chance of Jacob pulling out a white sock if he doesn't look first?

☐ $\frac{1}{2}$ ☒ $\frac{1}{5}$ ☐ $\frac{3}{10}$ ☐ $\frac{1}{3}$

SHADE ONE BOX

**QUESTION 8**

What is the best estimate of 34×56 ?

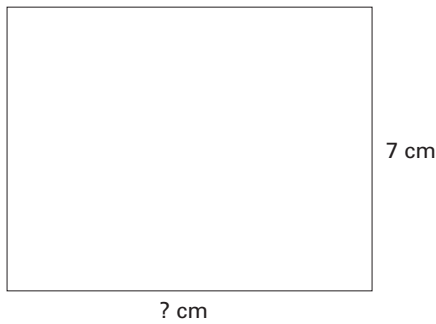
☐ 1200☐ 1500☐ 1700☒ 1800

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QUESTION 9

The area of this rectangle is 63 cm^2 .

**WRITE YOUR OWN ANSWER**

What is the length of the rectangle?

9 cm

QUESTION 10

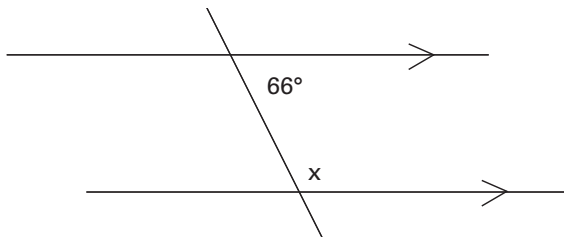
Lotte cuts her birthday cake into 12 equal slices. She eats one-quarter of the cake. How many slices are left?

**WRITE YOUR OWN ANSWER**

9 slices

QUESTION 11

What is the value of x in the diagram?

SHADE ONE BOX☐ 124° ☐ 66° ☐ 24° ☒ 114° **QUESTION 12**

A chemical alloy is made up of 12 per cent nickel, 5 per cent gold, 16 per cent copper and the remainder is iron. What percentage of iron is in the alloy?

SHADE ONE BOX☐ 87%☐ 77%☒ 67%☐ 57%**QUESTION 13**

$$2^3 + 4^2 - 0^4 = ?$$

SHADE ONE BOX☐ 14☒ 24☐ 10☐ 22

QUESTION 14

SHADE ONE BOX



I multiply a number by 3, square the result, add 5 and then multiply by 4. The answer is 15.

Which algebraic expression represents this process?

☐ $3a^2 + 5 \times 4 = 15$

☐ $9a^2 + 20 = 15$

☒ $4(9a^2 + 5) = 15$

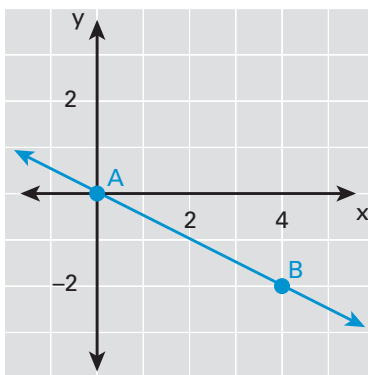
☐ $4(3a^2 + 5) = 15$

QUESTION 15



WRITE YOUR OWN ANSWER

What is the gradient (m) of this line?



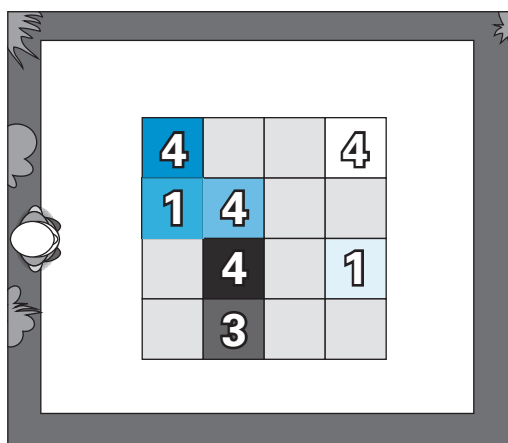
$m = -\frac{1}{2}$

QUESTION 16

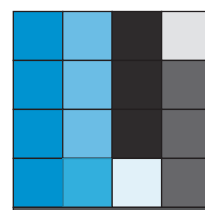
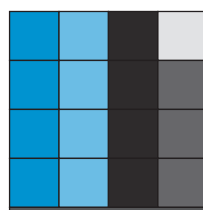
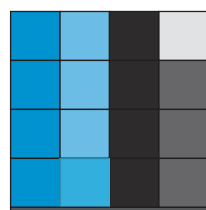
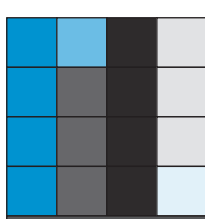
SHADE ONE BOX



A builder is looking at a model of a building site.



Which of the following represents what he sees?



QUESTION 17

SHADE ONE BOX

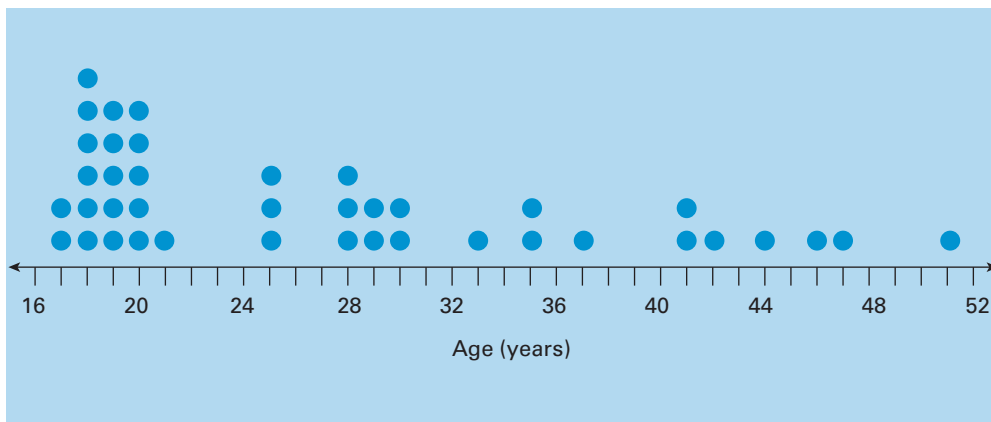
Which of the following data collected can be classified as continuous data?

- ☐ teams in the final series
- ☐ favourite pets
- ☒ daily maximum temperatures in September
- ☐ lengths of dogs' tails

QUESTION 18

SHADE ONE BOX

This dot plot shows the ages of 40 people enrolled for a judo class.



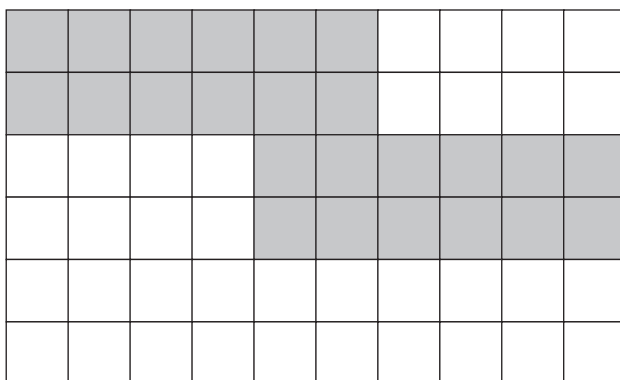
What is the median age of the people enrolled?

- ☐ 18 ☒ 25 ☐ 27 ☐ 28

QUESTION 19

SHADE ONE BOX

What percentage of the diagram is **not** shaded?



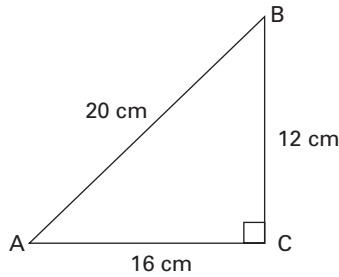
- ☐ 24% ☐ 36% ☐ 40% ☒ 60%

QUESTION 20

SHADE ONE BOX



What is the area of this triangle?

☐ 240 cm²☐ 192 cm²☐ 120 cm²☒ 96 cm²**QUESTION 21**

WRITE YOUR OWN ANSWER

Emma, who lives in Ballarat, Victoria, wants to call her friend George who lives in Darwin. Victoria is 1.5 hours ahead of the Northern Territory. If Emma calls at 11.00 a.m. Australian Eastern Daylight-saving Time, what time will it be for George? Give your answer in 24-hour time format.

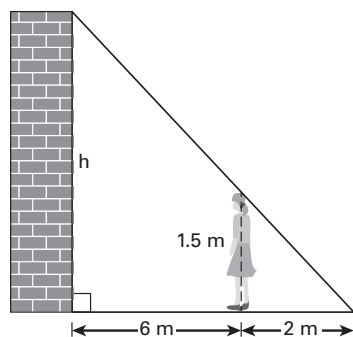
0930

QUESTION 22

SHADE ONE BOX



Zahra made the following measurements when trying to work out the height of a building.



What is the height of the building?

☒ 6 m☐ 5 m☐ 4.5 m☐ 3.5 m**QUESTION 23**

SHADE ONE BOX



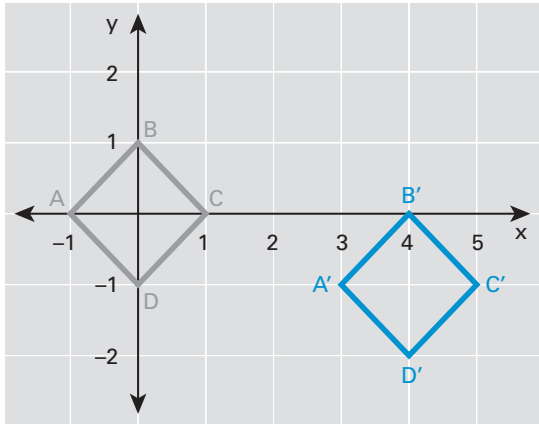
Which fraction has the same value as $3\frac{1}{3}$?

☒ $\frac{10}{3}$ ☐ $\frac{4}{3}$ ☐ 3.3☐ 3.1

QUESTION 24

SHADE ONE BOX

Which of the following best describes the translation of the grey figure to the blue figure in the diagram below?

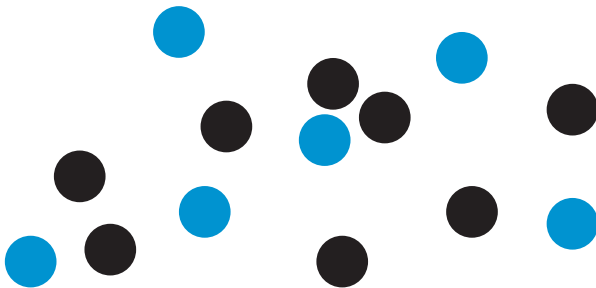


- ☐ 4 horizontally and -2 vertically
- ☐ 1 horizontally and 4 vertically
- ☐ -4 horizontally and 2 vertically
- ☒ 4 horizontally and -1 vertically

QUESTION 25

SHADE ONE BOX

What is the ratio of black to blue circles in the diagram below?



- ☒ 4:3
- ☐ 4:7
- ☐ 3:4
- ☐ 3:7

QUESTION 26



WRITE YOUR OWN ANSWER

If $\frac{3x}{4} - 1 = 8$, what is the value of x ?

12

QUESTION 27

SHADE ONE BOX

Two normal dice are tossed. What is the probability of getting a 10 as the sum of the numbers on the two dice?

- ☒ $\frac{1}{12}$
- ☐ $\frac{5}{18}$
- ☐ $\frac{5}{36}$
- ☐ $\frac{1}{6}$

QUESTION 28

SHADE ONE BOX



In the two-way table shown below, which represents a class of students, G represents girls and L represents speaking a language other than English at home.

	L	L'	
G	5	9	14
G'	3	10	13
	8	19	27

Note: G' means not a girl.

What is the number of girls who speak English at home?

☐ 14

☐ 5

☒ 9

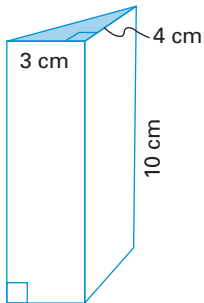
☐ 19

QUESTION 29

WRITE YOUR OWN ANSWER



What is the volume of this prism? cm³



QUESTION 30

SHADE ONE BOX



The table of values for $y = 6 - 2x^2$ is:

<input type="checkbox"/>	x	-2	-1	0	1	2
	y	10	8	6	4	2
<input type="checkbox"/>	x	-2	-1	0	1	2
	y	2	-4	-6	-4	2
<input checked="" type="checkbox"/>	x	-2	-1	0	1	2
	y	-2	4	6	4	-2
<input type="checkbox"/>	x	-2	-1	0	1	2
	y	14	8	6	8	14

QUESTION 31

SHADE ONE BOX



There are 5400 mice in a paddock with an area of 90 hectares (ha). What is the population density?

☐ 5400 mice/ha

☒ 60 mice/ha

☐ 600 mice/ha

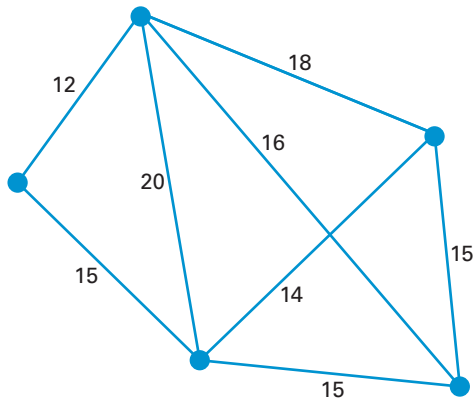
☐ 90 mice/ha

QUESTION 32

SHADE ONE BOX



Five computers are to be connected together with the minimum length of fibre optic cable. The possible links are shown in the diagram.



What is the minimum length of cable required?



56 m



60 m



58 m



57 m