



Mathletics

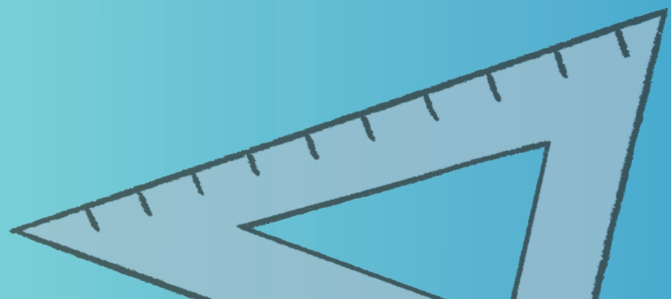
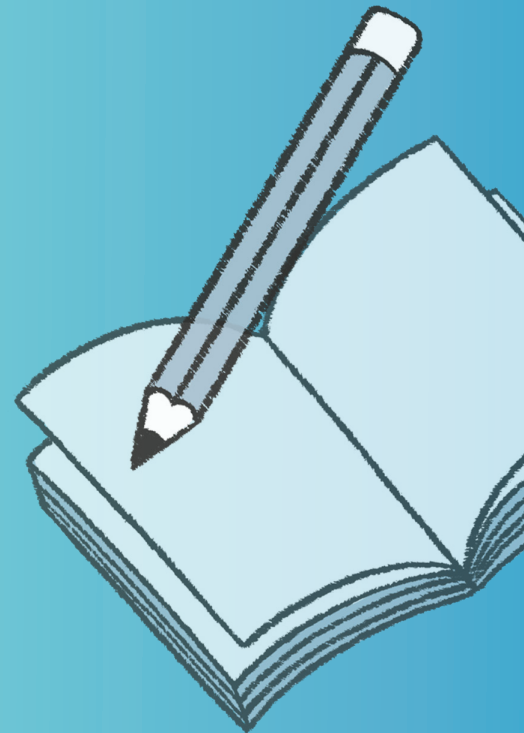
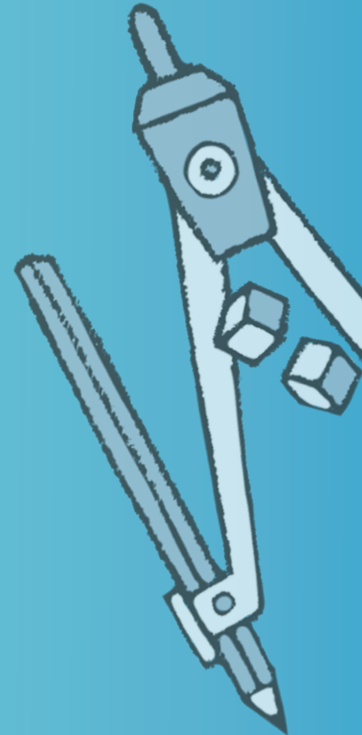
# NAPLAN Year 9 Numeracy Test 1

(Calculator Allowed)

## Answers



A 3P Learning product



1 Calculate  $54.33 \times 0.3456$  and round to 2 decimal places.

18.78

Write your answer in the box.



2 675 000 000 000 can be represented as:

$0.675 \times 10^{14}$     $67.5 \times 10^{12}$     $6.75 \times 10^{12}$     $67.5 \times 10^{11}$     $6.75 \times 10^{11}$

Shade one bubble.



3 Calculate:  $\sqrt{\frac{36}{4}} + \sqrt{25}$

8   14    $\frac{36}{25}$    5   16

Shade one bubble.



4 Calculate the answer to two decimal places:

$$\frac{9 \times 7.63}{4 \times 3.7}$$

5.02   4.55   0.22   4.64   63.52

Shade one bubble.



5 What is the area of the following parallelogram?

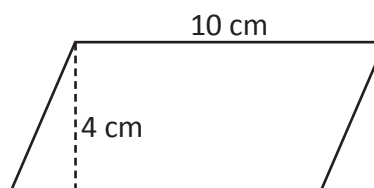


Diagram not drawn to scale.

$14 \text{ cm}^2$     $40 \text{ cm}^2$     $32 \text{ cm}^2$     $400 \text{ cm}^2$     $28 \text{ cm}^2$

Shade one bubble.



6 What is the value of  $b$ , if  $20 - b - 14 + 3b = 14$

2   3   9   6   4


          

Shade one bubble.




7 What is the surface area of a cube if the length of each edge is 3 cm?

- 12 cm<sup>2</sup>      40 cm<sup>2</sup>      32 cm<sup>2</sup>      24 cm<sup>2</sup>      54 cm<sup>2</sup>
- 

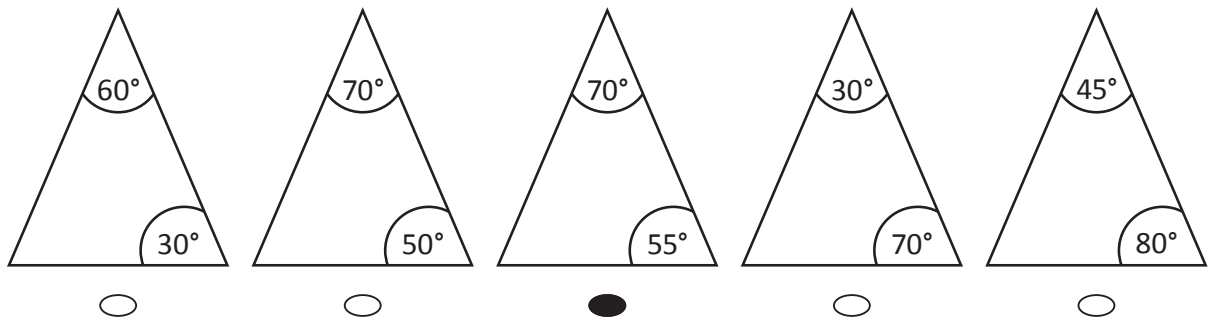
Shade one bubble. 


8 What is the value of  $x^2 - 3x + 3$  if  $x = 6$ ?

- 30      21      12      27      43
- 

Shade one bubble. 

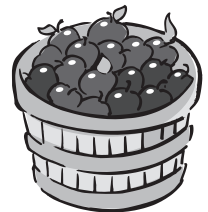
9 Which triangle shows the correct angles for an isosceles triangle?




Shade one bubble. 

10 James eats  $x$  apples and Nadia eats 5 fewer apples than James.

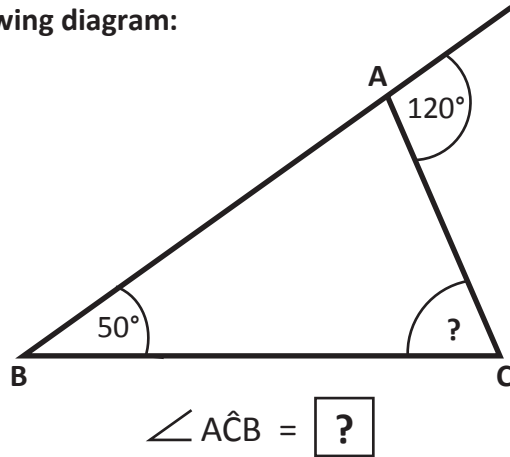
If, together, they ate 24 apples, what equation represents the amount of apples eaten?



- $24 - 5 = x$        $2x + 5 = 24$        $2x - 5 = 24$        $2x = 24$        $x - 5 = 24$
- 

Shade one bubble. 

11 In the following diagram:



- 10°      55°      180°      70°      50°
- 

Shade one bubble.

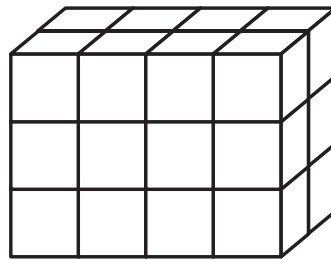
12 Find the value of  $y$ :

$$5^y = 125$$

$$y = \boxed{3}$$

Write your answer in the box.

13 How many small cubes cannot be seen from this view of the prism?



- 9      6      8      3      4
- 

Shade one bubble.

14 Brandon is 8 years younger than his brother. The product of their ages is the same as their father's age. If their father is 65, how old is Brandon?

- 18      10      15      12      5
- 

Shade one bubble.

15 In your fridge you have 5 pieces of fruit and 9 vegetables.

What is the ratio of fruit to all the fruit and vegetables in the fridge?

5 : 14

Write your answer in the box.



16 A waste management contractor must empty 120 bins every 4 hours to fulfill their contract.

Which rate of bin emptying best represents this?

30 bins  
per hour



25 bins  
per hour



40 bins  
per hour



240 bins  
per day



180 bins  
per day



Shade one bubble.



17 Miss Gilmore asked her class to write a report.

If she has a total of 270 pages, and each student submitted an average of 9 pages then how many students are in Miss Gilmore's class?

25



27



29



30



24



Shade one bubble.



18 Calculate the value of  $12a^2b - 6a$  if  $a = 2$  and  $b = 3$

132

Write your answer in the box.



19 Use the area and length of the base in the following right angle triangle to find the missing height.

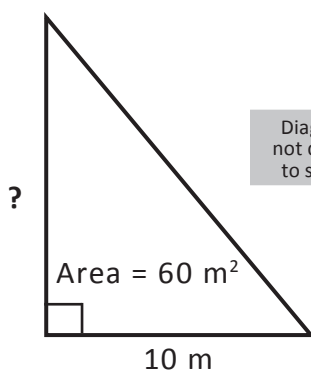


Diagram  
not drawn  
to scale.

6 m

8 m

12 m

16 m

10 m

Shade one bubble.



20  $\frac{61.07}{31.33} \times (21.04 - 15.03)^2$  is closest to:

- 70       -185       98       69       71

Shade one bubble.



21 If a hovercraft departs at 2:13 pm and travels for 2 hours and 38 minutes, what time will it arrive at its destination?

- 3:51 pm       4:51 pm       2:38 pm       4:41 pm       14:38 pm

Shade one bubble.



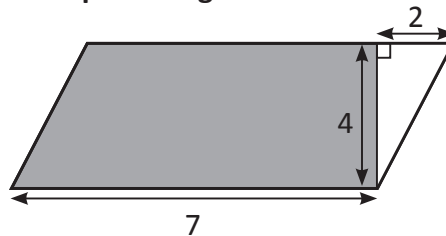
22 Approximate the following to the nearest whole number:  $\frac{62.5 + \sqrt{12}}{6.09}$

11

Write your answer in the box.



23 What is the area of the unshaded parallelogram?



- 13       20       32       28       24

Shade one bubble.



24 Calculate the surface area of the following object.

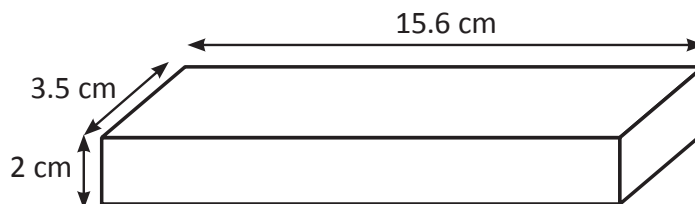


Diagram not drawn to scale.

- 71.4 cm<sup>2</sup>       126.2 cm<sup>2</sup>       109.2 cm<sup>2</sup>       185.6 cm<sup>2</sup>       142.8 cm<sup>2</sup>

Shade one bubble.



- 25 You have a jar of gummy bears. The probability of choosing a particular colour of gummy bear is given in the table below:

Colour	Red	Blue	Green	Yellow	Orange
Probability	0.15	0.2	0.25	0.05	?

What is the probability of choosing an orange gummy bear?

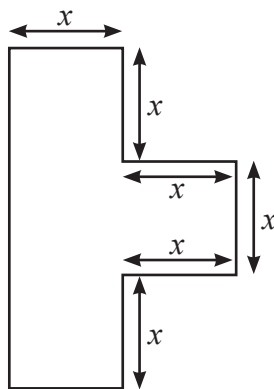
0.35

Write your answer in the box.



- 26 The following diagram represents Alex's bedroom.

Which expression gives the area of the bedroom?



$4x^2$

$2x^2$

$x^2$

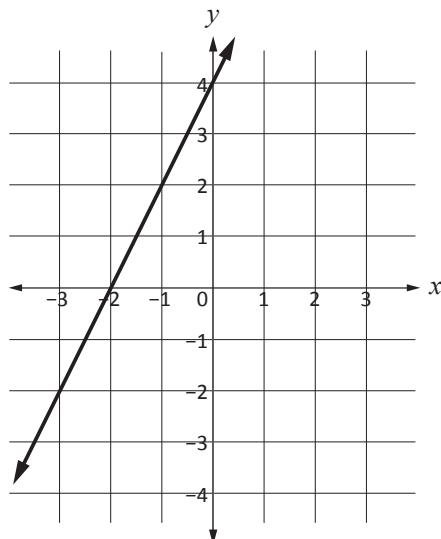
$3x^2$

$4x$

Shade one bubble.



- 27 The equation of the line is:



$y = 2x - 2$

$y = 2x + 4$

$y = 2x - 4$

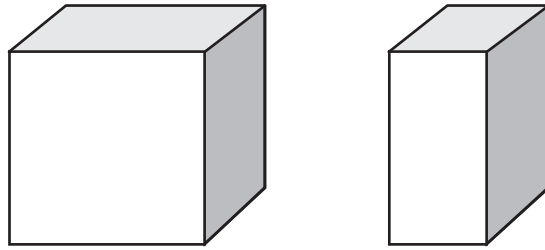
$y = -2x + 4$

$y = 4x$

Shade one bubble.



- 28 A cube of side length 4 cm is cut in half. How much smaller is the surface area of the new block?



16 cm<sup>2</sup>      32 cm<sup>2</sup>      48 cm<sup>2</sup>      56 cm<sup>2</sup>      24 cm<sup>2</sup>

Shade one bubble.

- 29 The following table is required for the next two questions. The table represents the number of medals won by the top three countries at the 2008 Olympic Games.

Medal Table				
	Gold	Silver	Bronze	Total
China	51	21	28	100
USA	36	38	36	110
Russia	23	21	28	72
Total	110	80	92	282

If all of the medals won by China and Russia were placed in a bag, what is the probability of drawing out a bronze medal?

$\frac{172}{56}$        $\frac{28}{282}$        $\frac{56}{282}$        $\frac{28}{100}$        $\frac{56}{172}$

Shade one bubble.

- 30 In the above table, which country has a 1:1 ratio of gold and bronze medals?

USA

Write your answer in the box.

END OF TEST