



Mathletics

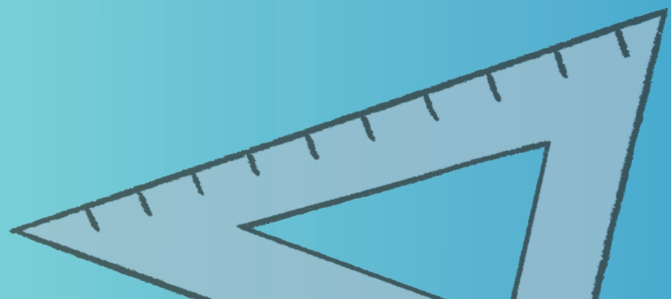
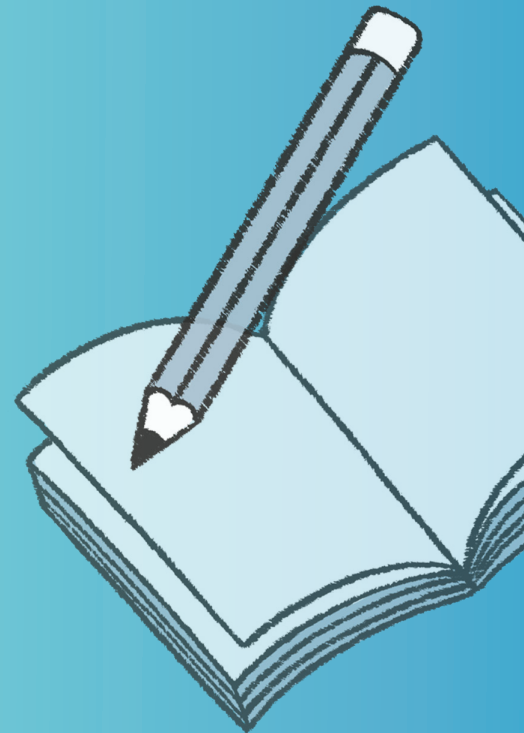
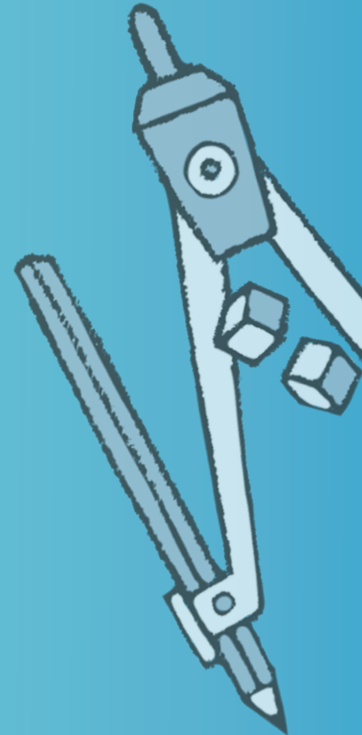
NAPLAN Year 9 Numeracy Test 2

(Non-Calculator)

Answers



A 3P Learning product



1 Which of the following numbers does not have 2, 3 and 4 as its factors?

- 24 48 60 72 120

Shade one bubble. 

2 Which of the following numbers is prime?

- 4 6 9 27 37

Shade one bubble. 

3 What is the middle number when these numbers are arranged in ascending order?


- 4.39 -4.60 -5.12 -4.29 -4.1

Shade one bubble. 

4 The temperature in the freezer is kept at -22°C .

If the room temperature is 18.4°C , what is the difference between these temperatures?

$^{\circ}\text{C}$

Write your answer in the box. 

5 $32 \div 0.4 =$


- 3.2 8 32 80 800

Shade one bubble. 

6 A laboratory experiment was completed at 3:15 pm after taking 1 hour and 37 minutes.

When was the experiment started?

pm

Write your answer in the box. 



7 $(4 \times 100) + (5 \times \frac{1}{10}) + (2 \times 1) + (6 \times \frac{1}{100}) + (9 \times 10)$ is equal to:

452.69 942.56 49256 409.526 492.56

Shade one bubble.



8 Which of the following fractions is closest to $\frac{1}{2}$?

(None of them are **equal** to $\frac{1}{2}$)

$\frac{1}{3}$ $\frac{1}{4}$ $\frac{447}{896}$ $\frac{30}{75}$ $\frac{306}{588}$

Shade one bubble.



9 Which one of the following would produce the largest answer?

$100 \div 0.1$ $100 - 0.1$ $100 + 0.1$ 100×0.1

Shade one bubble.



10 I counted the number of balls I have collected over the years. I have 3 soccer balls, 5 tennis balls, 1 football and 2 netballs.

What is the ratio of netballs to tennis balls?

2:5 5:10 5:2 10:3 3:10

Shade one bubble.



11 I counted the jelly beans in a small packet and found 6 white, 7 red, 4 yellow and 3 black jelly beans.

What is the percentage of the jelly beans that are not red?

15% 20% 35% 65% 85%

Shade one bubble.



12 $(\sqrt{188 + 37})^2$ is equal to:

- 12×12 13×13 14×14 15×15 16×16

Shade one bubble.

13 The value of $\sqrt{6\,000 - 100}$ is closest to:

- 50 60 70 80 240

Shade one bubble.

14 If a computer file repair process is successful 6 out of 9 times, find its percentage success rate (round to the nearest %):

%

Write your answer in the box.

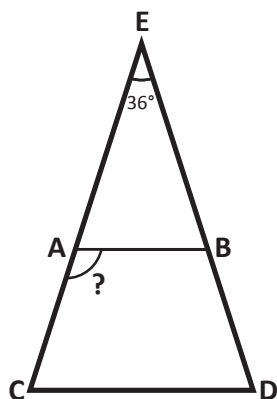
15 Scarlett loves making models of aeroplanes, especially bi-planes. She is very proud of her model of a plane that is 35 cm long. Her friend Audrey has dared her to make a larger model of the same plane so that the ratio of the new model to the old model is 3:2.

How long will the new model be?

- 38.5 cm 40 cm 45.5 cm 50 cm 52.5 cm

Shade one bubble.

16 For the isosceles triangle ECD, the line AB is parallel to CD.



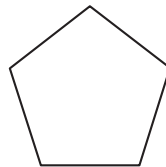
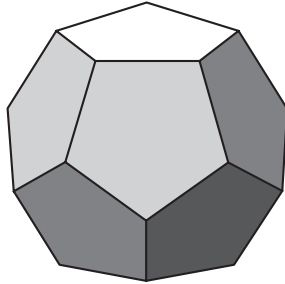
If $\angle E$ is 36° , $\angle BAC$ measures:

- 88° 108° 118° 120° 140°

Shade one bubble.

- 17 A regular dodecahedron consists of 12 identical, regular pentagons on each face. The area of one of these pentagons is 15 cm.

What is the total surface area of the dodecahedron?



Area = 15 cm²

25 cm² 150 cm² 180 cm² 210 cm² 250 cm²

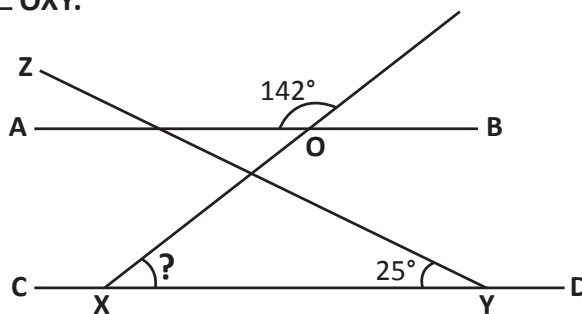


Shade one bubble.



- 18 AB and CD are parallel lines that are cut by ZY and OX.

Find the value of $\angle OXY$.



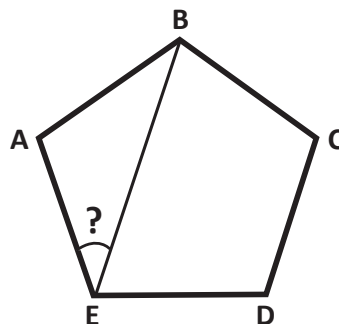
25° 38° 42° 47° 55°



Shade one bubble.



- 19 ABCDE is a regular pentagon. A line is drawn from B to E.



What is the size of $\angle AEB$?

36° 54° 72° 108° 144°



Shade one bubble.



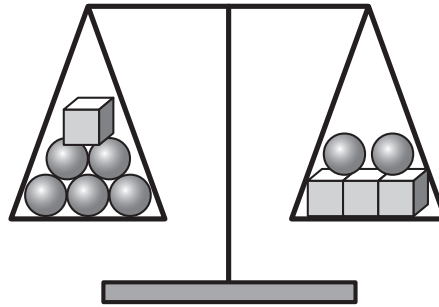
- 20 Hugo is 3 years older than his sister Ashley. Ashley is only half of her father's age.
If Ashley's father is 52 years old, how old is Hugo?

29

Write your answer in the box.



- 21 The scales shown in the picture are balanced.



If spheres weigh 210 grams each, how much does each cube weigh?

- 100 210 315 415 500

Shade one bubble.



- 22 $\frac{2x + 2}{4} = 3$, the value of x in this equation is:

- 5 7.5 2.5 42.5 1

Shade one bubble.



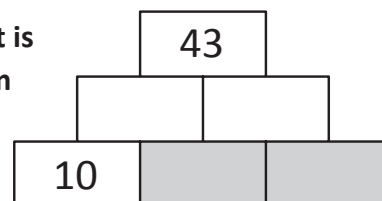
- 23 The solution to the equation: $6x + 5 = 3x + 17$ is:

$x =$ 4

Write your answer in the box.



- 24 Each brick is equal to the sum of the bricks it is sitting on. The two grey bricks on the bottom of the pile have exactly the same value.



Determine the value of a grey brick.

Grey brick = 11

Write your answer in the box.

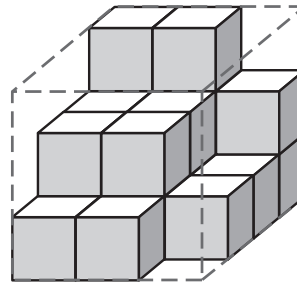


25 $\frac{3x + 5}{2} = 5x - 8$, the value of x in this equation is:

3

Write your answer in the box.

26 Shirley has been unpacking a container of boxes. The contents of the container are shown in the diagram.

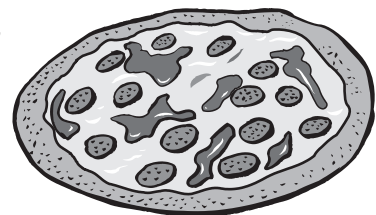


If the container was full, how many boxes has she unpacked so far?

- 10 16 20 36 42
-

Shade one bubble.

27 30 pizzas were made for a party. There were 15 pepperoni, 5 hawaiian, 10 spicy mexican.



What is the probability that one of these 30 pizzas, selected at random, is hawaiian?

- $\frac{1}{5}$ $\frac{1}{6}$ $\frac{10}{30}$ $\frac{5}{15}$ $\frac{1}{3}$
-

Shade one bubble.

28 A farmer feeds hay and grain to his cattle during the winter months. He buys 3 tonnes of grain each week and allows 20 kg for each cow per day.



What is the maximum number of cows he can feed each week?

- 3 cows 7 cows 9 cows 21 cows 23 cows
-

Shade one bubble.

- 29 Triangle ABC is a right-angled triangle with side AB = 12 cm and side BC = 16 cm.

What is the length of hypotenuse AC?

10 cm 12 cm 14 cm 16 cm 20 cm

Shade one bubble.



- 30 Papex Pty Ltd produce paper tissues in boxes shaped as rectangular prisms. These boxes have dimensions of 14 cm by 6 cm by 4 cm. They plan to pack these boxes in a 10-box plastic-covered module to sell to shops.

What is the volume of this module?

84 cm³ 24 cm³ 336 cm³ 33.6 cm³ 3 360 cm³

Shade one bubble.



END OF TEST