



Mathletics

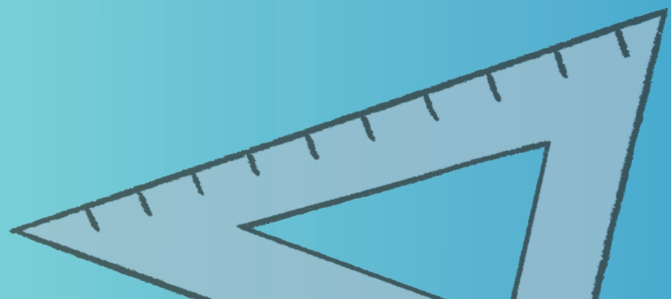
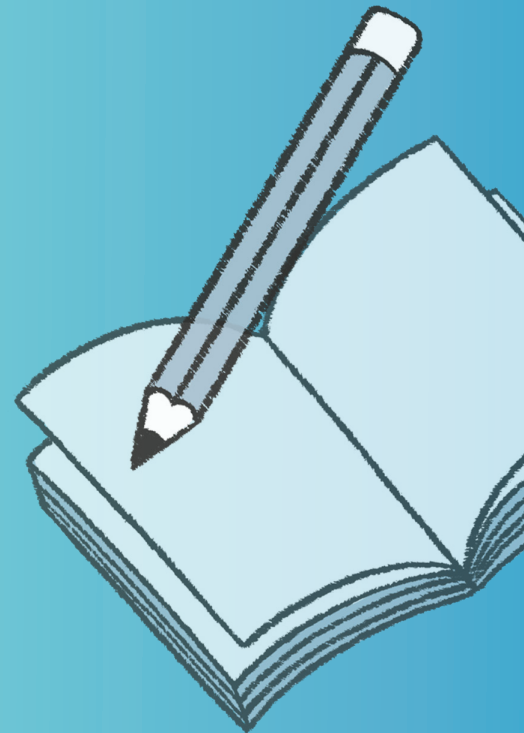
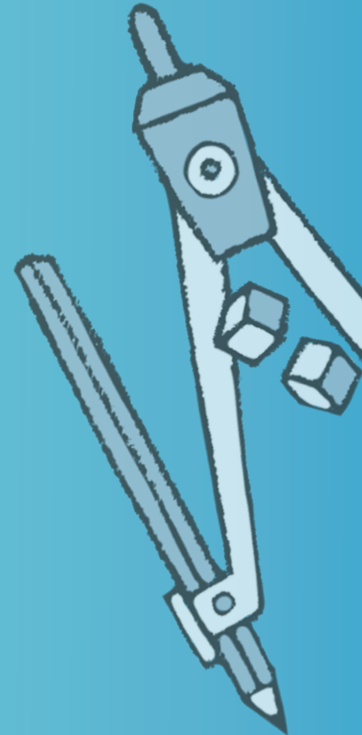
NAPLAN Year 9 Numeracy Test 1

(Non-Calculator)

Answers



A 3P Learning product



1 Which number is missing in the grey square in the following pattern?

3	6	9	12
7	10	13	16
11	14	?	20
15	18	21	24


- 15
- 16
- 17
- 18
- 19

Shade one bubble. 

2 In the following table, if you were to cross out all the prime numbers as well as the multiples of 3, then what number would remain?

2	5	7	11
13	18	19	25
29	30	31	37

25

Write your answer in the box. 

3 The following graph displays the number of students with different shoe sizes:




According to the column graph, what is the percentage of students who have a shoe size of 8 or less?

- 5%
- 10%
- 15%
- 20%
- 25%

Shade one bubble. 

4 Solve for x : $4x + 2 = 2x + 8$

$x =$ 3

Write your answer in the box. 

5 $\sqrt{80}$ is between:

- 9 and 10 8 and 9 7 and 8 5 and 8 6 and 7
-

Shade one bubble.



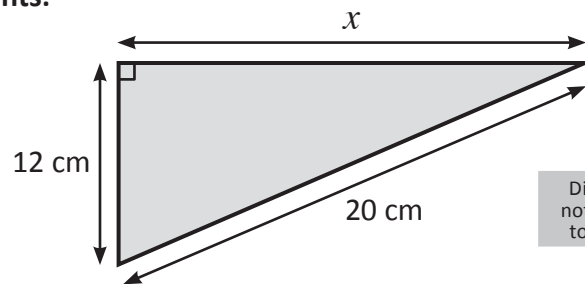
6 Which of these is halfway between $\frac{3}{4}$ and $\frac{4}{5}$?

- $\frac{31}{40}$ $\frac{16}{20}$ $\frac{3}{5}$ 1 $\frac{29}{40}$
-

Shade one bubble.



7 A triangle has the following measurements:



How long is x ?

- 14 cm 16 cm 20 cm 24 cm 12 cm
-

Shade one bubble.



8 Lachlan spends 12 hours playing piano over 2 days.

What percentage of this time does Lachlan play piano?

%

Write your answer in the box.



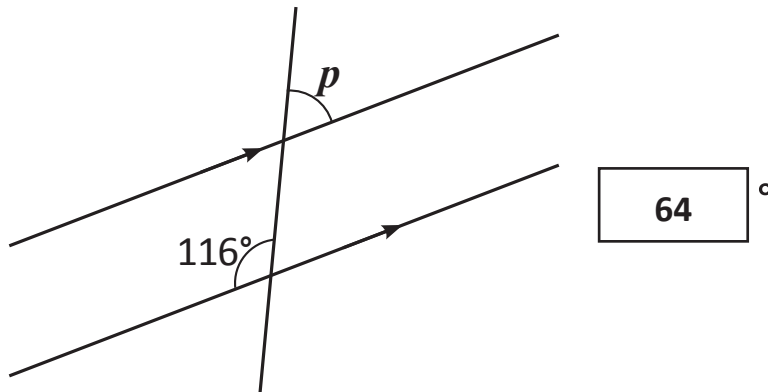
9 A bowl of jelly beans has a ratio 3:4 for green jelly beans to pink jelly beans.

How many green jelly beans are there if there are 24 pink jelly beans?

Write your answer in the box.



10 What is the size of angle p ?



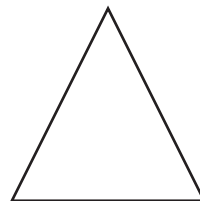
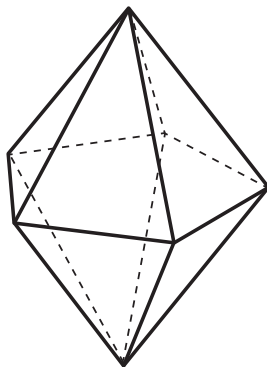
Write your answer in the box.

11 Which is the smallest number?

- $\frac{22}{50}$ $\frac{15}{30}$ $\frac{19}{40}$ $\frac{59}{80}$ $\frac{31}{60}$

Shade one bubble.

12 What is the surface area of the following decahedron?



Area = 22 cm^2

Diagram not drawn to scale.

- 32 cm^2 180 cm^2 202 cm^2 220 cm^2 $2\,200 \text{ cm}^2$

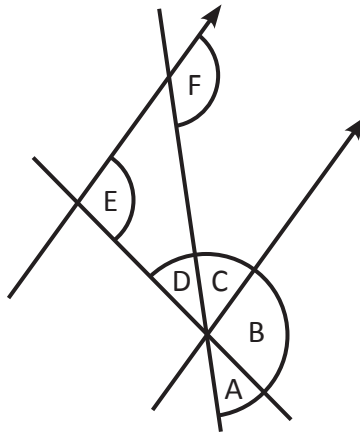
Shade one bubble.

13 Solve for x : $\frac{5x + 7}{4} - 1 = 2$

$x =$

Write your answer in the box.

Use the diagram for Question 14 and Question 15.



14 Which angle is equal to D?

- D C A F B
-

Shade one bubble.

15 Which single angle, if you add it to F, will make 180°?

- D C A F B
-

Shade one bubble.

16 $21 \div 0.3 = \boxed{?}$

- 7 0.7 70 700 0.07
-

Shade one bubble.

17 A sports team has 10 girls and 8 boys.

What is the ratio of girls to the total number of players on the team?

or 4:9

Write your answer in the box.

18 If a temperature in Australia is recorded as 14°C and a temperature in Nepal is recorded as -15°C then what is the difference in temperature between the two areas?

°C


Write your answer in the box.

19 The following table is a breakdown of how many people play clarinet in a year 9 Class.

	Boys	Girls
Play clarinet	2	3
Don't play clarinet	4	3

If a student from the class is selected at random, what is the probability of selecting a girl who plays clarinet?

- $\frac{3}{5}$
 $\frac{1}{4}$
 $\frac{1}{3}$
 $\frac{3}{6}$
 $\frac{1}{2}$

Shade one bubble. 

20 Calculate the volume of the following right-angled triangular prism:

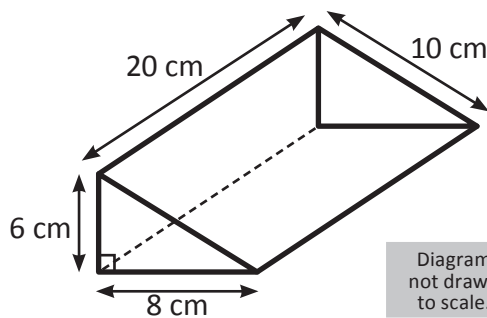


Diagram not drawn to scale.

- 1600 cm³
 960 cm³
 480 cm³
 1200 cm³
 3200 cm³

Shade one bubble. 

21 Which one of the following expressions has the same value as $\sqrt{2}(\sqrt{2} + \sqrt{4})$

- $\sqrt{2}$
 $4\sqrt{2} + 2\sqrt{2}$
 $2 + 2\sqrt{2}$
 $2\sqrt{4} + 2\sqrt{2}$
 $2\sqrt{2} + 2\sqrt{4}$

Shade one bubble. 

22 $7.47 - 3.78 = \boxed{?}$

- 3.31
 3.39
 3.69
 4.31
 4.69

Shade one bubble. 

23 The values which make $y = 5x + 13$ and $y = 2x + 7$ both true are:

$x = 3, y = 2$

$x = 3, y = -2$

$x = -2, y = 3$

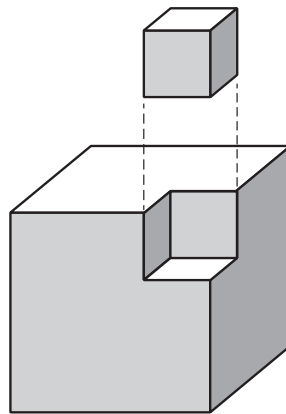
$x = -3, y = -2$

$x = 32, y = -3$

Shade one bubble.



24 A 1 cm cube is removed from a 3 cm cube, what is the volume of the remaining shape?



10 cm^3

9 cm^3

3 cm^3

21 cm^3

26 cm^3

Shade one bubble.



25 What is the following expression equal to:

$$(\sqrt{375 + 125})^2$$

35×25

10×50

17×15

20×10

30×25

Shade one bubble.



26 A parking lot can fit 5 cars for every 8 m lengths on each floor.

If each floor is 320 m long and there are 5 floors, how many cars are there when the parking lot is full?

1200

1000

200

2560

512

Shade one bubble.



- 27 When Bec went to sleep her clock showed 8:35 pm. When she woke up the next morning it showed 7:25 am.

For how long did Bec sleep?

- 9 hours 50 minutes
 9 hours 10 minutes
 9 hours 15 minutes
 8 hours 50 minutes
 10 hours 50 minutes

Shade one bubble.



The following information is required for questions 28, 29 and 30.

Linda spent \$22 on a bag of 25 limes. She sells the limes for \$2 each. Any profit she makes, after paying for the bag of limes, is given to charity.



- 28 If Linda only sells 19 limes, how much profit did she make?

- \$18 \$22 \$16 \$10 \$6

Shade one bubble.



- 29 If Linda wants to give \$26 to charity. How many limes will she have to sell?

- 25 24 23 22 21

Shade one bubble.



- 30 Find an equation that expresses Linda's profit, P , in terms of the number of limes, n , that she sells.

$$P = 2n - 22$$

Write your answer in the box.



END OF TEST