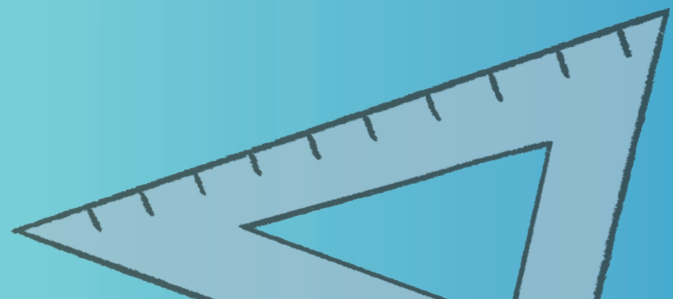
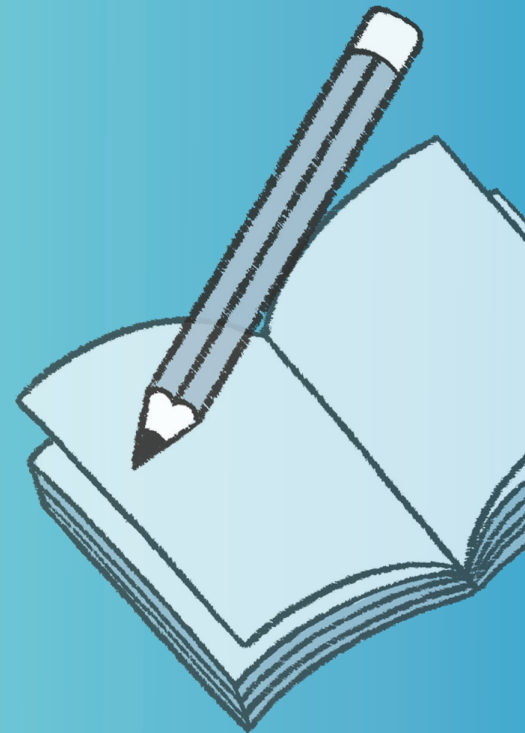
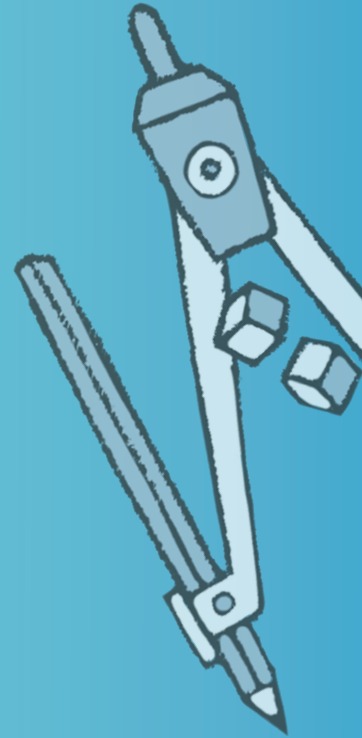




Mathletics

# NAPLAN Year 9 Numeracy Test 1 (Non-Calculator)



# Year 9 Numeracy Practice Test 1 – Non-calculator

## Student details

First name \_\_\_\_\_

Last name \_\_\_\_\_

Class \_\_\_\_\_ Date \_\_\_\_\_

## Test instructions

You have 40 minutes to complete this test.

You are **NOT allowed** to use a calculator.

You should use a pencil to write your answers or shade in the bubble.

If you make a mistake, rub it out thoroughly.

*Revised 2014 edition, all rights reserved. The following test has been designed by 3P Learning to prepare students for the National Assessment Program Numeracy Test. This test is to be used for revision purposes only. 3P Learning does not guarantee that the format of this test is the same as an actual test.*

# Year 9 Numeracy Practice Test 1 – Non-calculator

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

Write your answer in the box.

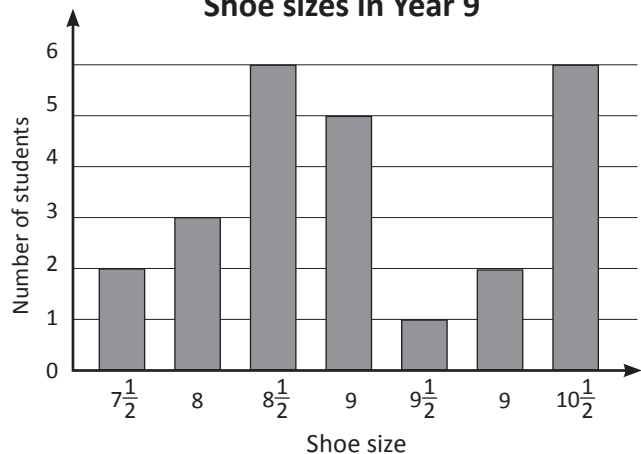


3 The following graph displays the number of students with different shoe sizes:

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%

Shoe sizes in Year 9



Shade one bubble.



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

$x =$

Write your answer in the box.



# Year 9 Numeracy Practice Test 1 – Non-calculator

5  $\sqrt{80}$  is between:

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

Shade one bubble.



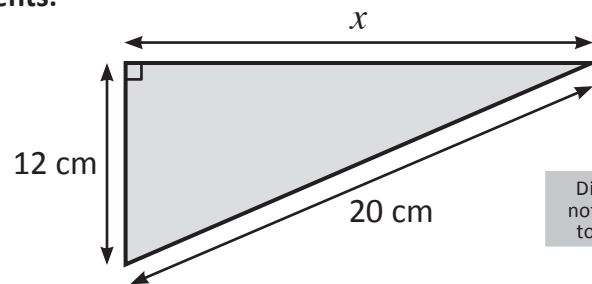
6 Which of these is halfway between  $\frac{3}{4}$  and  $\frac{4}{5}$ ?

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

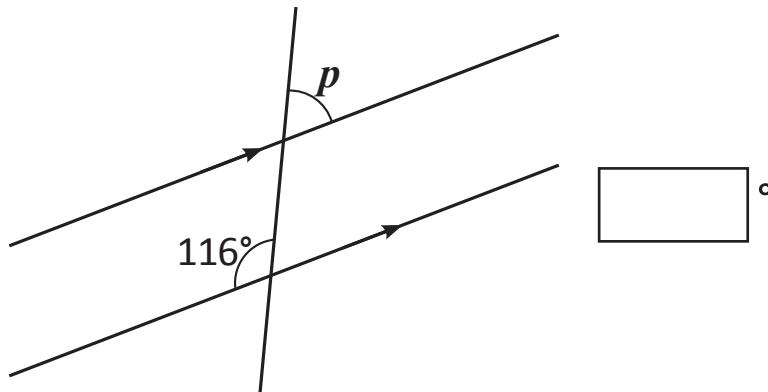
How many green jelly beans are there if there are 24 pink jelly beans?

Write your answer in the box.



# Year 9 Numeracy Practice Test 1 – Non-calculator

10 What is the size of angle  $p$ ?



Write your answer in the box.



11 Which is the smallest number?

$$\frac{22}{50}$$

$$\frac{15}{30}$$

$$\frac{19}{40}$$

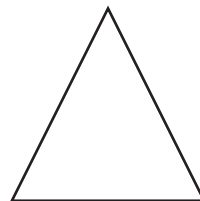
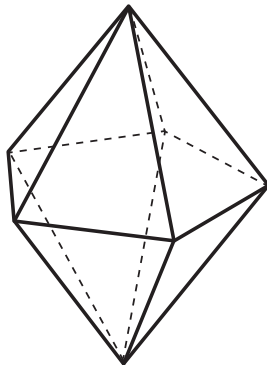
$$\frac{59}{80}$$

$$\frac{31}{60}$$

Shade one bubble.



12 What is the surface area of the following decahedron?



Area =  $22 \text{ cm}^2$

Diagram not drawn to scale.

$32 \text{ cm}^2$

$180 \text{ cm}^2$

$202 \text{ cm}^2$

$220 \text{ cm}^2$

$2\,200 \text{ cm}^2$

Shade one bubble.



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

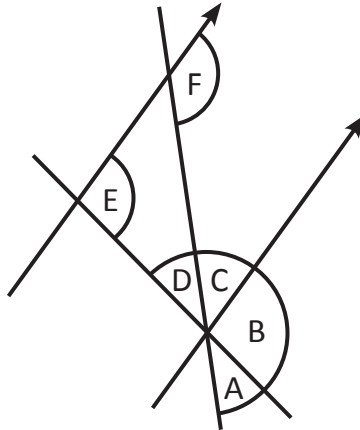
$x =$

Write your answer in the box.



# Year 9 Numeracy Practice Test 1 – Non-calculator

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  $21 \div 0.3 = \square ?$

- 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?

:

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.




# Year 9 Numeracy Practice Test 1 – Non-calculator

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:

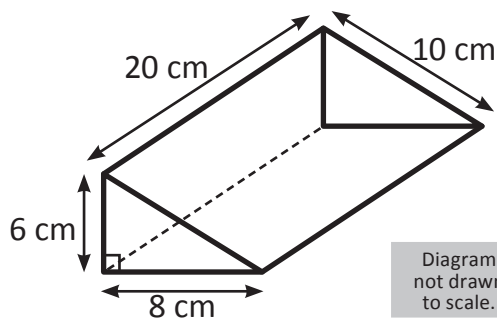


Diagram not drawn to scale.

- 1600 cm<sup>3</sup>  
 960 cm<sup>3</sup>  
 480 cm<sup>3</sup>  
 1200 cm<sup>3</sup>  
 3200 cm<sup>3</sup>

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. 

# Year 9 Numeracy Practice Test 1 – Non-calculator

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

$x = 3, y = 2$

$x = 3, y = -2$

$x = -2, y = 3$

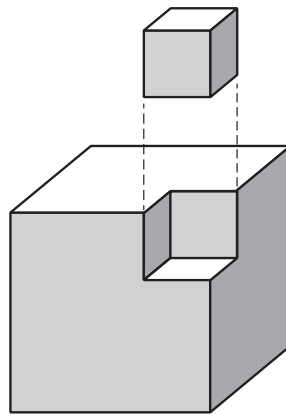
$x = -3, y = -2$

$x = 32, y = -3$

Shade one bubble.



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



$10 \text{ cm}^3$

$9 \text{ cm}^3$

$3 \text{ cm}^3$

$21 \text{ cm}^3$

$26 \text{ cm}^3$

Shade one bubble.



25 What is the following expression equal to:

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

$35 \times 25$

$10 \times 50$

$17 \times 15$

$20 \times 10$

$30 \times 25$

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.



# Year 9 Numeracy Practice Test 1 – Non-calculator

- 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                   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Shade one bubble.



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

$P =$
-------

Write your answer in the box.



## END OF TEST