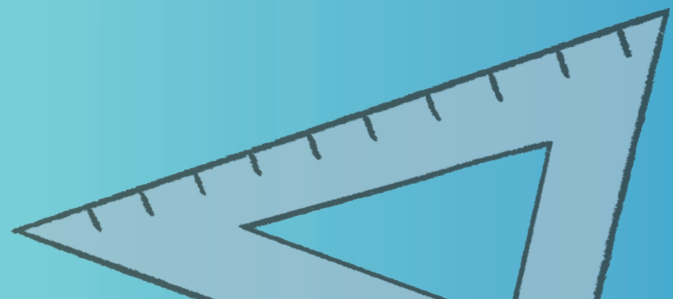
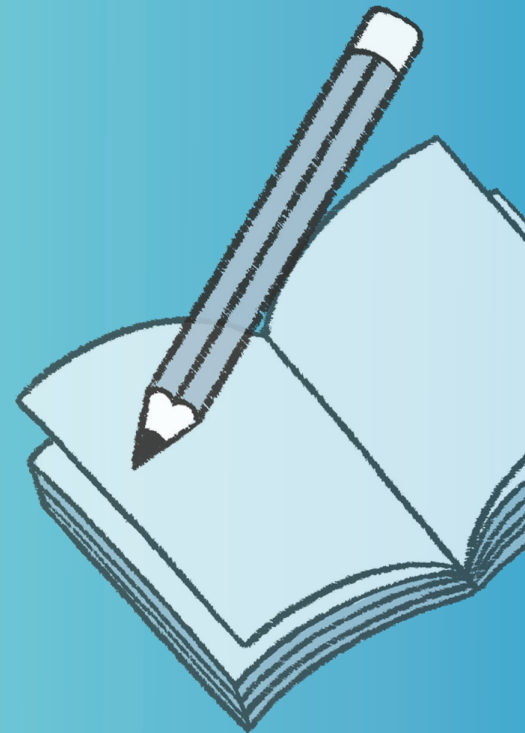
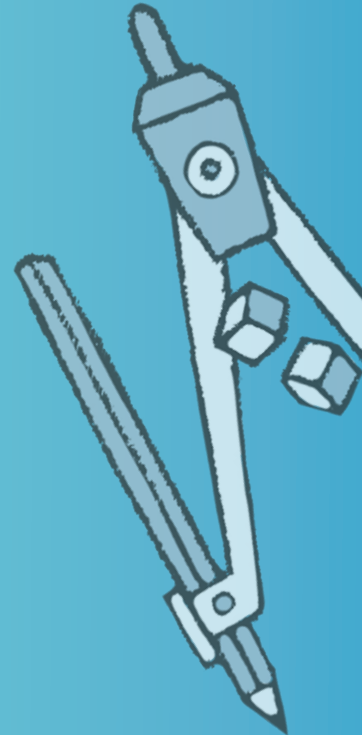




Mathletics

# NAPLAN Year 9 Numeracy Test 2

(Calculator Allowed)



# Year 9 Numeracy Practice Test 2 – Calculator allowed

## Student details

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

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

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

## Test instructions

You have 40 minutes to complete this test.

You are **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 2 – Calculator allowed

1 Calculate the answer:

$$3.67 \times 0.05 = \boxed{?}$$

- 1.935     0.1835     3.72     33.72     0.1935

Shade one bubble.



2 Calculate the answer:

$$\frac{4 \times 3.23}{3 \times 8.2} = \boxed{\phantom{0000}}$$

(correct to two decimal places)

Write your answer in the box.



3 The digits 3, 4 and 2 are substituted into the following equation:

$$3a + b - c = 5$$

If  $b$  is 3, the value of  $c$  is

Write your answer in the box.



4  $(4.3 - 2.6^3) - \frac{42}{3.6 \times 11}$  is closest to:

- 15     -14     -52     -142     -4

Shade one bubble.



5 The square root of 3 700 is between:

- 0 and 10  
 10 and 50  
 60 and 100  
 100 and 1 000  
 1 000 and 1 000 000

Shade one bubble.



# Year 9 Numeracy Practice Test 2 – Calculator allowed

- 6 A test consists of 30 questions. It is structured so that each part of the English course is tested.

Comprehension: 4

Vocabulary: 8

Spelling: 10

Writing: 3

Grammar: 5

What is the ratio of spelling questions to grammar questions?

1:2

2:1

2:10

10:2

5:1

Shade one bubble.



- 7 A block of chocolate contains 48 small identical squares of chocolate arranged in equally sized rows.



If there are 8 columns, the number of rows in the block of chocolate is:

2

3

4

5

6

Shade one bubble.



- 8  $a^x \times b^y = 1\,024$

$a$ ,  $x$ ,  $b$  and  $y$  are all whole numbers.

If  $a = 2$  and  $b = 2$  then the values for  $x$  and  $y$  are:

$x = 2, y = 3$

$x = 3, y = 6$

$x = 6, y = 4$

$x = 5, y = 1$

$x = 3, y = 2$

Shade one bubble.



- 9 Q equals  $3.25 \times 10^3$

R equals  $2.53 \times 10^2$

S equals  $5.204 \times 10^2$

T equals  $3.52 \times 10^3$

List Q, R, S and T in ascending order:

Q, R, S, T

R, S, Q, T

T, Q, S, R

T, S, R, Q

R, Q, S, T

Shade one bubble.



# Year 9 Numeracy Practice Test 2 – Calculator allowed

10 If  $x = -2$  then  $x^2 - 4 + 9$  is equal to:

- 9            -9            5            -5            3
- 

Shade one bubble.



11 The difference between  $\sqrt{8}$  and  $\sqrt{2}$  is squared. The result is:

- 1.96            1.9881            2            5.96            6
- 

Shade one bubble.



12 Gen's plane leaves Brisbane airport at 9:30 am on Thursday morning on its way to Los Angeles (USA). The flight takes a total of 13.5 hours. Los Angeles time is 18 hours behind Melbourne time.



What day and time will Gen's flight arrive in Los Angeles?

Write your answer in the box.



13 How many edges are there on a rectangular prism?

- 4            6            8            12            16
- 

Shade one bubble.



14 An isosceles triangle has two angles equal to  $35^\circ$ .

What is the size of the third angle?

- $70^\circ$              $90^\circ$              $110^\circ$              $120^\circ$              $135^\circ$
- 

Shade one bubble.



15 The rhombus ABCD has a perimeter of 56.36 cm.

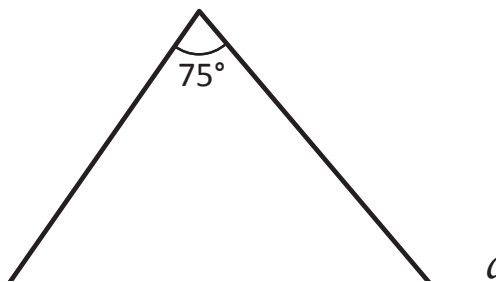
Find the length of CD correct to 2 decimal places.

- 7.21 cm            8.63 cm            28.18 cm            14.09 cm            19.67 cm
- 

Shade one bubble.



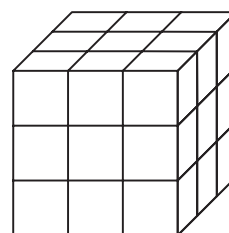
- 16 In the diagram shown, the size of angle  $a$  is:



- 180°      115°      130°      125°      65°
- 

Shade one bubble.

- 17 A cube is constructed from 27 smaller cubes (as shown). The outside of the cube is painted red.



How many of the smaller cubes will have exactly 1 side painted?

- 2      6      8      12      16
- 

Shade one bubble.

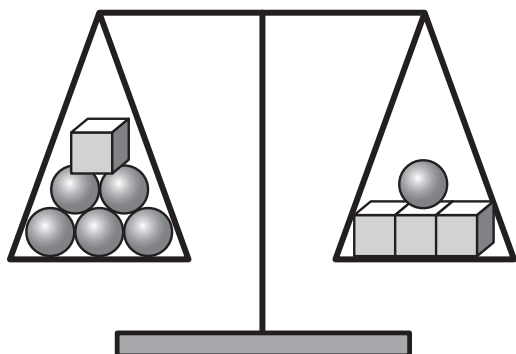
- 18 Jackson is 4 years older than his brother Lachie. The product of their ages is the same as their father's age.

If Lachie's father is 45 years of age, how old is Jackson?

Write your answer in the box.

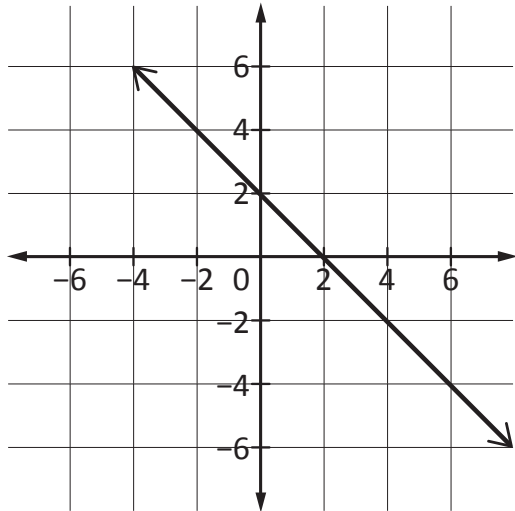
- 19 The scales shown in the picture are balanced.

If the cubes weigh 45 grams each, how much do each of the spheres weigh?


 g

Write your answer in the box.

20 The equation of the line is:



- $y = x + 2$
- $y = 2x$
- $y = x - 2$
- $y = -2x$
- $y = -x + 2$

Shade one bubble.

21 Hugo is  $x$  years old. Max is 2 years older than Hugo. Together their ages total 28.

Which equation represents this family's age structure?

$2x + 2 = 28$

$x + 2 = 28$

$2x - 2 = 28$

$x - 2 = 28$

$2x = 28$

Shade one bubble.

22 Find the solution to the equation:

$$\frac{3x - 15}{3} = 2x - 9$$

$x =$

Write your answer in the box.

23 A rectangular sheet of paper measures 35 cm × 10 cm. A square of area 25 cm<sup>2</sup> is cut from one corner of the rectangle.



The perimeter of the larger piece of paper is:

35 cm

315 cm<sup>2</sup>

350 cm

90 cm

315 cm

Shade one bubble.

## Year 9 Numeracy Practice Test 2 – Calculator allowed

- 24 The area of a square is  $70 \text{ cm}^2$ .

How long is each side?

7 cm      17.5 cm      9.27 cm      8.37 cm      20 cm  
                       

Shade one bubble.



- 25 Students in Mr Darnley's class had a total of \$420.00 to spend at the school fete. Each student had on average \$21.00.

How many students are in Mr Darnley's class?

15      17      20      23      25  
                       

Shade one bubble.



- 26 There are 28 students in Miss Herringer's mathematics class: 14 girls and 14 boys. 8 students were late to class.

If 5 of the students late to class were boys, what is the ratio of girls to boys that were on time?

14:12      5:8      9:11      11:9      28:5  
                       

Shade one bubble.



- 27 A triangle that is 25 cm high has an area of  $100 \text{ cm}^2$ .

The base of the triangle measures:

1 cm      2 cm      4 cm      8 cm      12 cm  
                       

Shade one bubble.



- 28 A bag contains 5 red marbles, 3 white marbles and 4 blue marbles. Three red marbles are drawn from the bag and not replaced.

What is the probability that the next marble drawn will be red?

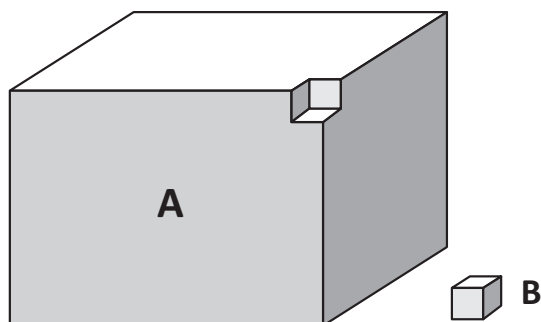
2      1      0.4      0.22      0  
                       

Shade one bubble.



# Year 9 Numeracy Practice Test 2 – Calculator allowed

- 29 A solid piece of chocolate (A) measures 20 cm × 10 cm × 15 cm. A 2 cm cube (B) has been cut from the original block.



The change in surface area for block A is:

- 8 cm<sup>2</sup> more surface area
- 24 cm<sup>2</sup> more surface area
- 24 cm<sup>2</sup> less surface area
- 8 cm<sup>2</sup> less surface area
- No change in surface area

Shade one bubble.

- 30 Ashley runs a small catering business that delivers snacks and lunches to local factories. She asked her customers if they preferred sandwiches or wraps for lunch.

The results are shown in this table:

	Filling	Sandwiches	Wraps
Special 1	Salami and Cheese	70	55
Special 2	Chicken and Garden Salad	54	30
Special 3	Tuna, Mayonaise and Tomato	28	48

What is the probability that Special 1 (Salami and Cheese) wrap will be chosen?

- $\frac{125}{285}$
- $\frac{70}{285}$
- $\frac{55}{125}$
- $\frac{133}{285}$
- $\frac{55}{285}$

Shade one bubble.

## END OF TEST