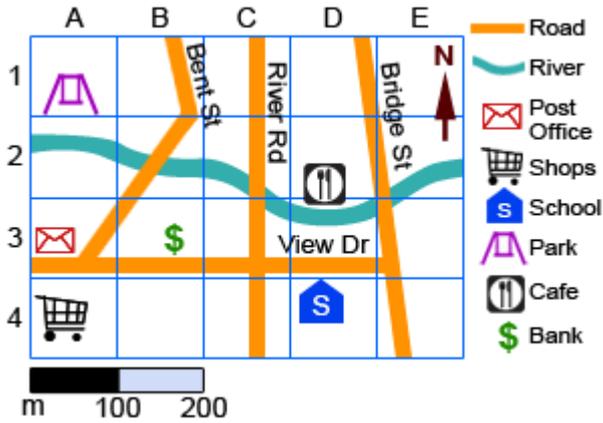


# Year 7 Diagnostic 1 for NAPLAN (Non-calculator)

## Question 1



You are 200 m east of the intersection of Bent St and View Dr.

Your grid reference is:

## Question 2

A company manufactured 78 456 TVs and sold 67 332.

How many remain unsold?



## Question 3

If you chose one of these jellybeans without looking, you would be *most likely* to choose \_\_\_\_\_ and *least likely* to choose \_\_\_\_\_.

Select the two missing words, in order:

- a. blue, black
- b. blue, yellow
- c. red, black
- d. yellow, black

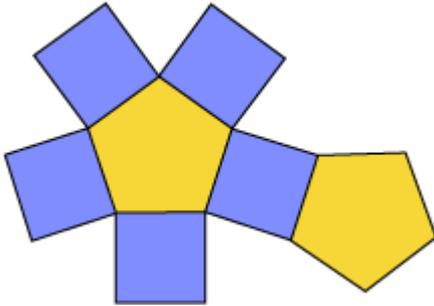


## Question 4

Choose the correct working for  $15\,997 + 2700$ .

- a.  $16\,000 + 2700 - 3$
  - b.  $15\,000 + 2700 - 3$
  - c.  $16\,000 + 2700 + 3$
  - d.  $15\,000 + 2700 + 3$
- 

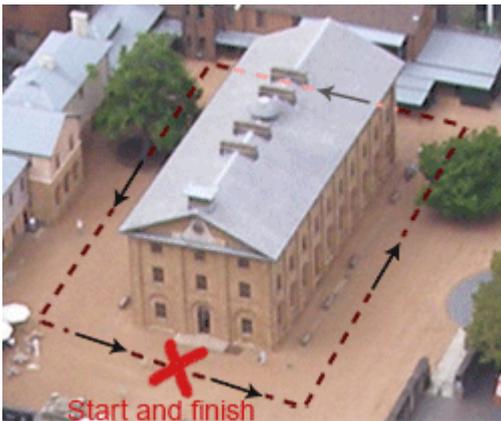
## Question 5



This is the net for:

- a. a pentagonal prism
  - b. a pentagonal pyramid
  - c. a square prism
  - d. a square pyramid
- 

## Question 6



If you walk all the way around a rectangular building, coming back to face the direction that you started, through what angle have you turned?

Total angle turned = °

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### Question 7

How many centimetres in 1 km?

1 km =  cm

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### Question 8



What is the total mass of the bananas?  
(Use decimals to show your answer.)

kg

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### Question 9



This model car was created to a 1: 90 scale.

If the model is 4 cm long, how long was the real car?

Answer is in *metres*.

m

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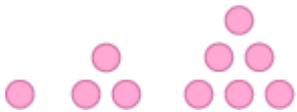
## Question 10

The multiplication fact  $47 \times 83 = 3901$  leads to two division facts.

What are they?

- a)  $83 \div 47 = 1 \text{ r } 35$  and  $3901 \div 83 = 47$
  - b)  $3901 \div 47 = 83$  and  $3901 \div 83 = 47$
  - c)  $83 \div 47 = 1 \text{ r } 36$  and  $3901 \div 83 = 1$
  - d)  $3901 \div 83 = 1$  and  $3901 \div 47 = 83$
- 

## Question 11



Counters are used to build triangles  $t_1, t_2, t_3$ .

Complete the table of values for this pattern

Triangle number	1	2	3	...	6
No. of counters, $c$	1	3	6	...	<input type="text"/>

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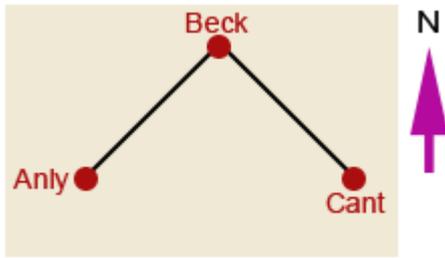
## Question 12

A tank of water was  $\frac{3}{4}$  full. Watering the animals used  $\frac{3}{10}$  of a full tank and another  $\frac{1}{5}$  of a full tank was used to water the vegetables.

What fraction of a full tank was left?

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### Question 13



The four towns Anly, Beck, Cant and Dell form a square.

Where would the town of Dell be on the map?

Select *all true* statements.

- a. Due south of Beck
- b. SE of Beck
- c. NE of Cant
- d. SW of Cant
- e. SE of Anly
- f. Due east of Anly

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### Question 14

$$0.789 \times 100 = \square$$

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### Question 15

A school bought chairs for \$20 each and tables for \$35 each. Exactly the same amount was spent on chairs as on tables.



Less than \$300 was spent altogether, so how many chairs and tables were bought?

chairs

tables

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## Question 16

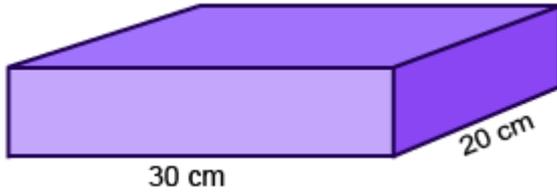
What time was it 16 hours 23 minutes before 11 am Wednesday?

*Enter am or pm in the last input box.*

Tuesday :

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## Question 17



This container has a capacity of 4200 mL.

How deep is the container?

cm

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## Question 18

Complete the working.

$$\frac{21}{25} = \frac{\boxed{\phantom{00}}}{100}$$
$$= \boxed{\phantom{00}}\%$$

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## Question 19

Tan travels 1 km 90 m to school, Joe travels 1.8 km, and Mike travels 1689 m.

Who travels the longest distance?

- a. Tan
  - b. Joe
  - c. Mike
-

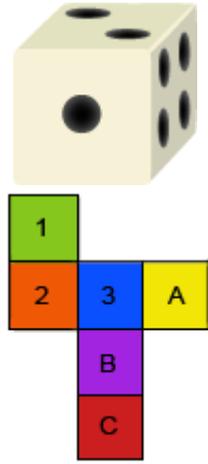
## Question 20

The opposite faces of a die add to 7 (eg 1 and 6 are opposite each other).

This net is of a die that uses numerals instead of dots. However, some of the numerals have been replaced by the pronumerals A, B and C.

Which number does each letter stand for?

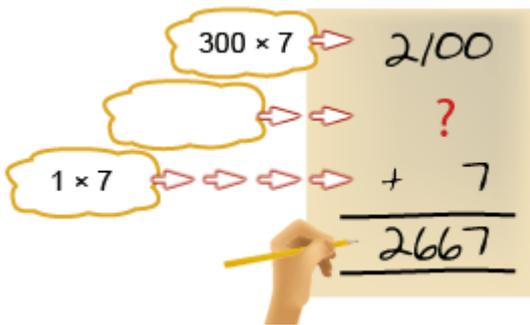
$$A = \square \quad B = \square \quad C = \square$$



## Question 21

The picture shows a student's working for a multiplication calculation. Some of the steps are missing.

Use the information given to work out the number being multiplied.



$$\square \times 7 = 2667$$

## Question 22



How many different combinations can be made when choosing one of chocolate, strawberry, vanilla or blueberry icecream with or without a topping of sprinkles?

$$\square$$

### Question 23

These digits are written on four cards:

**0, 1, 4, 6**

The four cards can be lined up side by side to make a four-digit number.

What is the *largest* four-digit number that can be made with these cards?

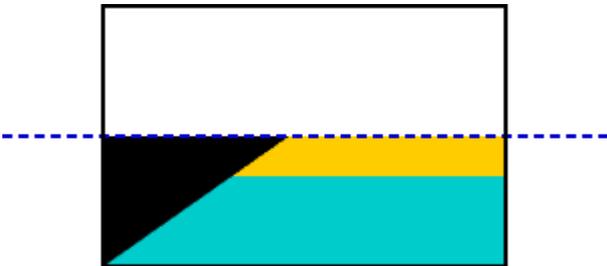
### Question 24

Mia circled the days on a calendar up to and *including* her birthday.

She started on June 29 and her birthday is July 5, so how many days did she circle?

### Question 25

The flag of the Bahamas has one horizontal line of symmetry.



How many horizontal stripes does the flag have?

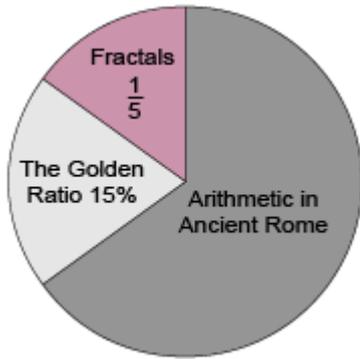
### Question 26

At 3 o'clock the hands of an analog clock enclose a quadrant.

The hands will next enclose an area larger than a quadrant:

- just after 3 o'clock
- just after a quarter past three
- just after half past three

## Question 27



Students were asked to select one of three assignment topics: Arithmetic in Ancient Rome, Fractals or The Golden Ratio.

A fifth of the students chose 'Fractals' and 15% chose 'The Golden Ratio'.

What percentage chose 'Arithmetic in Ancient Rome'?

%

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## Question 28



A box holds 18 chocolates and has a gross mass of 310 g.

Each chocolate weighs the same.

When 8 chocolates have been eaten, the box and the remaining chocolates together have a mass of 210 g.

What is the mass of each chocolate?

g

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## Question 29

A *parallelogram* has its *vertices* at A, B, C and D.

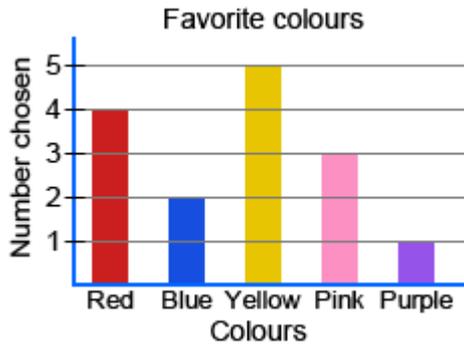
A is the point (0, 0), B is the point (1, 5) and C is the point (9, 5).

What are the coordinates of D?

(  ,  )

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### Question 30



If you displayed this data as a divided bar graph, what would be the fraction taken up by red?

Enter your answer as a fraction in its simplest form.

### Question 31

Manly ferries arrive at Circular Quay every 15 minutes and Parramatta jetcats arrive every 20 minutes.

If the boats arrive together at 12:50 pm, when will they next arrive together?

 :  pm

### Question 32

There are 35 items in this lucky dip.

The chance of picking a balloon at random from the lucky dip is  $\frac{1}{7}$ .

How many balloons would need to be added to make the chance of picking a balloon at random  $\frac{1}{4}$ ?

 balloons