

NATIONAL ASSESSMENT PROGRAM  
LITERACY AND NUMERACY

**NUMERACY  
NON-CALCULATOR**



**YEAR**

**7**

**2010**

**SESSION 2**

**0:40**

Time available for students to  
complete test: 40 minutes

Use 2B or HB  
pencil **only**

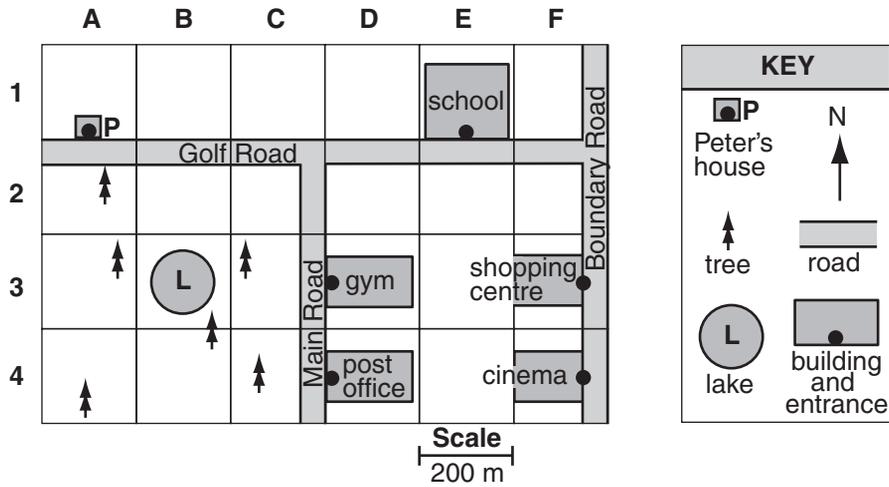


# YEAR 7 NUMERACY (NON-CALCULATOR)



1 Peter drew a map of his neighbourhood.

Shade one bubble.



What is the grid reference of the lake?

- A1                      A3                      B3                      B4
- 

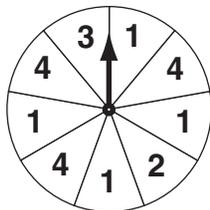
2 A country football game between the Dogs and the Tigers was attended by 525 people. The Dogs had 218 supporters. The rest supported the Tigers.



How many people supported the Tigers?

- 343                      317                      313                      307
- 

3 This spinner is used in a board game.



Sanjay spins the arrow.

On which number is the arrow **most** likely to stop?

- 1                      2                      3                      4
-

# YEAR 7 NUMERACY (NON-CALCULATOR)

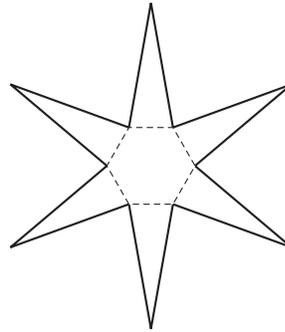


4

Angela made this net.

What 3D object will it make?

- hexagonal prism
- octagonal prism
- hexagonal pyramid
- octagonal pyramid



Shade one bubble.



5

Anne wants to find the answer to  $1999 + 1476$ .

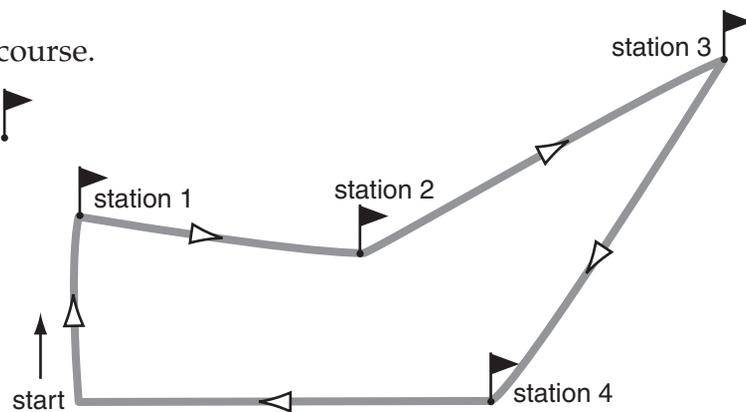
Which of these shows a way to get the **same** answer?

- $2000 + 1477$
- $2000 + 1475$
- $2005 + 1400$
- $2005 + 1500$

6

This is a map of a running course.

There are 4 drink stations.



At which drink station do the runners make the **greatest** change of direction?

station 1



station 2



station 3



station 4



# YEAR 7 NUMERACY (NON-CALCULATOR)



7 Ryan bought these 4 items.

Shade one bubble.



The total mass of Ryan's items is **closest** to

3 kg

4 kg

8 kg

9 kg

8 The picture shows a stone head.



The picture is 3 cm high. The actual head is 60 cm high.

What scale is used in the picture?

3 cm represents 20 cm

6 cm represents 30 cm

1 cm represents 2 cm

1 cm represents 20 cm

9 Three of these calculations give the same value.

Which one gives a **different** value?

$241 \times 1$

$1 \times 241$

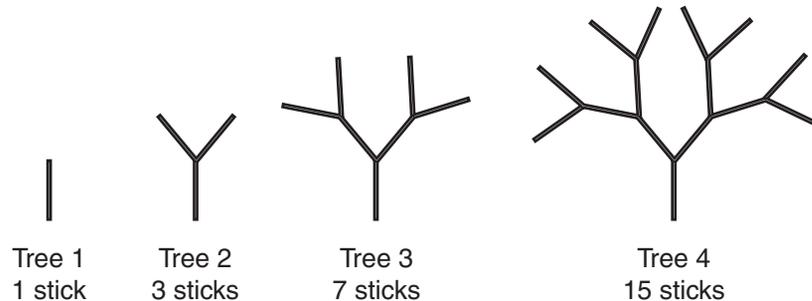
$241 \div 1$

$1 \div 241$

# YEAR 7 NUMERACY (NON-CALCULATOR)



- 10** Lucy made 4 tree designs using sticks.  
There is a pattern in the way the trees grow.



Lucy continues the pattern in the same way.

How many sticks will Tree 5 have?

- |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 23                    | 31                    | 35                    | 45                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- 11** Jenny is exactly 3 years old.  
Her brother Ken is exactly 17 months old.  
How many months older than Ken is Jenny?

- |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 13                    | 14                    | 19                    | 21                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- 12** A flea can jump up to 200 times its body length.  
The body length of the flea is 2.5 mm.

What is the furthest distance the flea can jump?

- |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 5 mm                  | 50 mm                 | 500 mm                | 5000 mm               |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- 13** A set of traffic lights is red for half the time, orange for  $\frac{1}{10}$  of the time and green for the rest of the time.

For what fraction of the time is the set of traffic lights green?

- |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|
| $\frac{1}{3}$         | $\frac{2}{5}$         | $\frac{6}{10}$        | $\frac{10}{12}$       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

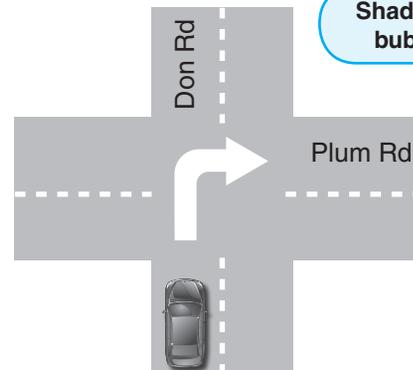
# YEAR 7 NUMERACY (NON-CALCULATOR)



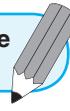
**14** A car is travelling **north-east** along Don Road. The car is about to turn right into Plum Road.

In which direction will the car be travelling **after** it turns right?

- north-east
- south-west
- north-west
- south-east



Shade one bubble.



**15** Which metric unit would a builder use to measure the volume of sand in a truck like this?

- cubic metres
- square metres
- cubic centimetres
- square centimetres



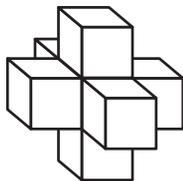
**16** Write a number in the box to make this number sentence correct.

$$24 + 15 > \boxed{\phantom{000}} \times 5$$

Write your answer in the box.



**17** This 3D symmetrical object is made by joining cubes. It is then painted.

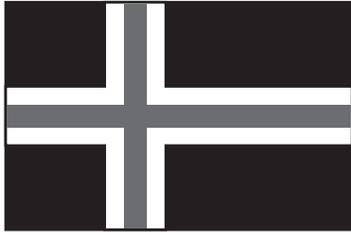


How many faces are painted?

# YEAR 7 NUMERACY (NON-CALCULATOR)



18



Shade one bubble.



How many lines of symmetry does the design on this flag have?

4

3

2

1

19

$$37.9 \times 10 =$$

3790

3709

37.90

379

20

When it is 12 noon in Melbourne, it is 10 am in Singapore on the same day. A plane leaves Melbourne at 11:30 am Melbourne time and flies to Singapore. The flight takes 6 hours and 50 minutes.

What is the time in Singapore when the plane arrives?

4:20 pm

5:20 pm

6:20 pm

8:20 pm

21

Which percentage has the same value as  $\frac{44}{50}$ ?

94%

88%

44%

22%

22

Which of these is the longest distance?

0.1203 km

123 m

1230 cm

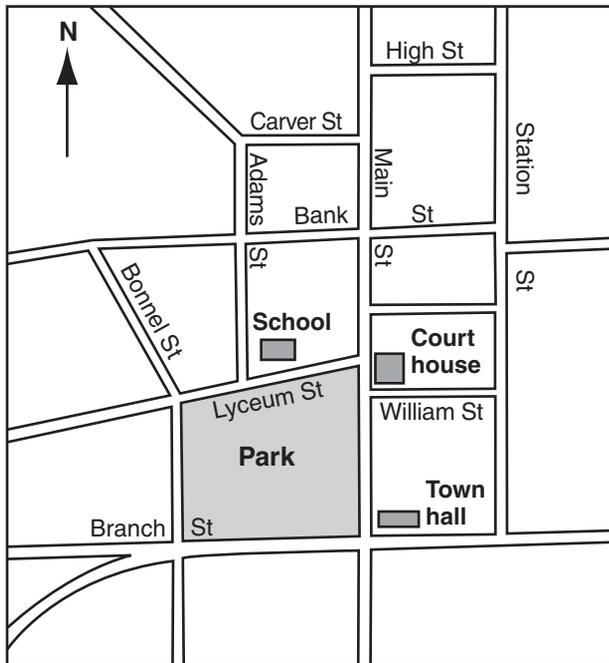
12 030 mm

# YEAR 7 NUMERACY (NON-CALCULATOR)



**23** Jill lives in a street that runs directly north–south.  
Her house is north of the park and west of the school.

Shade one bubble.



What street does Jill live in?

- Adams St     
  Bonnel St     
  Station St     
  Main St

**24** A grocer buys 25 boxes of melons.  
Each box costs \$28.  
The total cost of the boxes is  $\$28 \times 25$ .

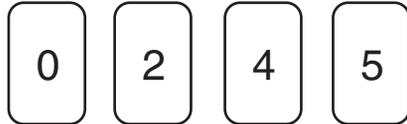
Which calculation is another way of working out the total cost?

- $7 \times 100$      
   $18 \times 250$      
   $(56 \div 2) \times 50$      
   $8 + (20 \times 25)$

# YEAR 7 NUMERACY (NON-CALCULATOR)



25 These are four number cards.



Use each card once to make this number sentence true.

$$\boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \times \boxed{\phantom{0}} = 2010$$

Write your answer  
in the boxes.



26 A meeting is held on the first Tuesday of each month.  
There was a meeting held on 6 March.

What is the date of the April meeting?

April

Write your answer  
in the box.



27 This Ferris wheel turns at a constant speed.  
It takes 4 minutes to turn through a complete circle.



What angle does the Ferris wheel turn through in 90 seconds?

°

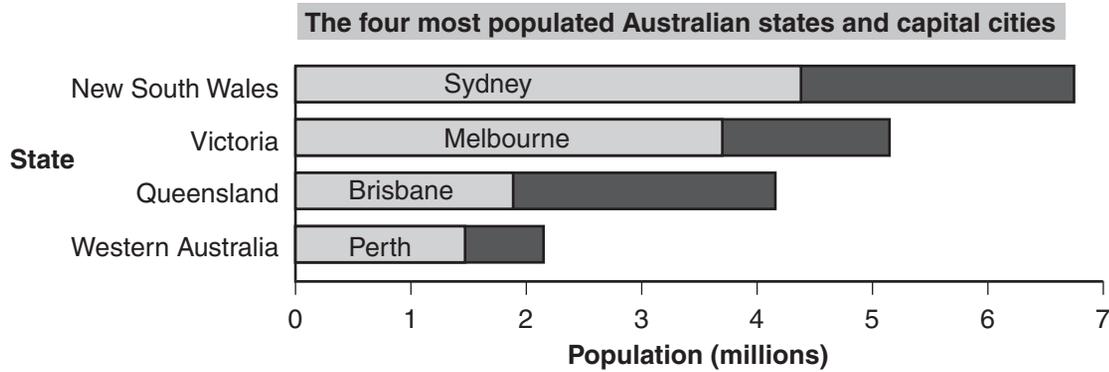
# YEAR 7 NUMERACY (NON-CALCULATOR)



28

Each bar of this graph shows the population of a state and the population of its capital city.

Shade one bubble.



Which of these states has the **lowest percentage** of its population living in its capital city?

- New South Wales
- Victoria
- Queensland
- Western Australia

29

Ben has 2 identical pizzas.

He cuts one pizza equally into 4 large slices.

He then cuts the other pizza equally into 8 small slices.

A large slice weighs 32 grams more than a small slice.

What is the mass of **one** whole pizza?

Write your answer in the box.

grams



30 This is the label from a can of soup.

Write your answer in the box. 

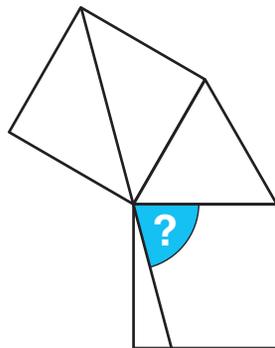
<b>Soup Delight</b> RICH 'N' RED Tomato 		
	Quantity	
	Per 100 g	One serve
ENERGY	150 kJ	450 kJ
PROTEIN	0.6 g	1.8 g
FAT	0.3 g	0.9 g
CARBOHYDRATE - SUGARS	6.9 g 6.3 g	20.7 g 18.9 g
SODIUM	345 mg	1035 mg

What is the mass of one serve of this soup?  grams

31 Peta has some plums to give to her friends.  
 If she gives each friend 4 plums, she will have 6 plums left over.  
 She cannot give each friend 5 plums because she would need 4 more plums.

How many plums does Peta have?

32 Two squares are drawn on the sides of an equilateral triangle as shown.  
 A straight line is then drawn through the point where the 3 shapes touch.



What is the size of the shaded angle?  °

**STOP – END OF TEST**