



NATIONAL ASSESSMENT PROGRAM  
LITERACY AND NUMERACY

# NUMERACY

## CALCULATOR ALLOWED



YEAR  
**7**

2008



**0:40**

### SESSION 2

Time available for students to complete  
test: 40 minutes

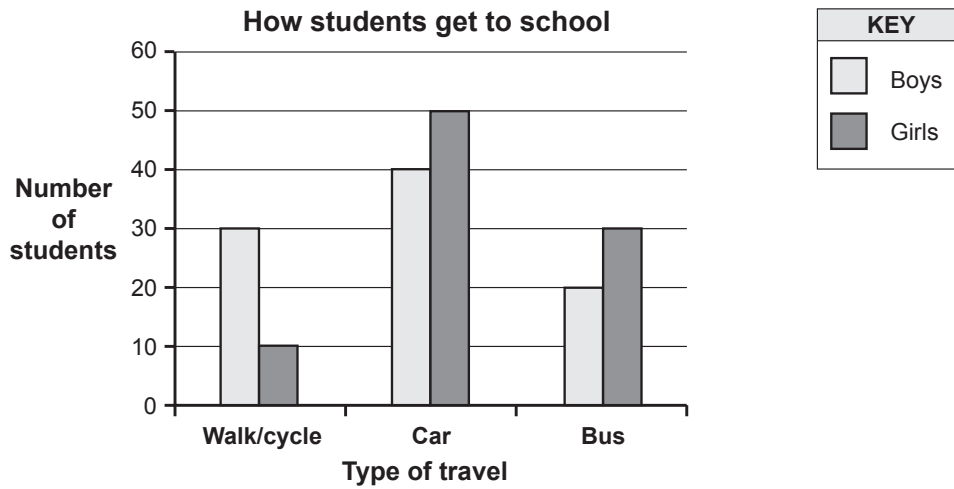
Use 2B or HB  
pencil **only**



# YEAR 7 NUMERACY

- 1** This graph shows how students at Ascot College usually get to school.

Write your answer in the box.



Use the information in the graph to complete this table.

	Walk/cycle	Car	Bus
Boys	30		20
Girls	10	50	30

- 2** Which number is **four thousand and seventy-six**?

4067

4760

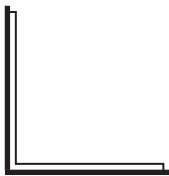
4706

4076

Shade one bubble.



- 3** Which picture shows a card opened to about  $45^\circ$ ?









# YEAR 7 NUMERACY

- 4 This table summarises the time Mick spent walking his dog over five days.

Shade one bubble.



TIME SPENT WALKING THE DOG	
Day	Time
Monday	45 minutes
Tuesday	50 minutes
Wednesday	1 hour
Thursday	62 minutes
Friday	43 minutes

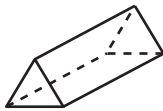
What was the average (mean) time for these walks?

- 40 minutes      52 minutes      65 minutes      260 minutes
- 

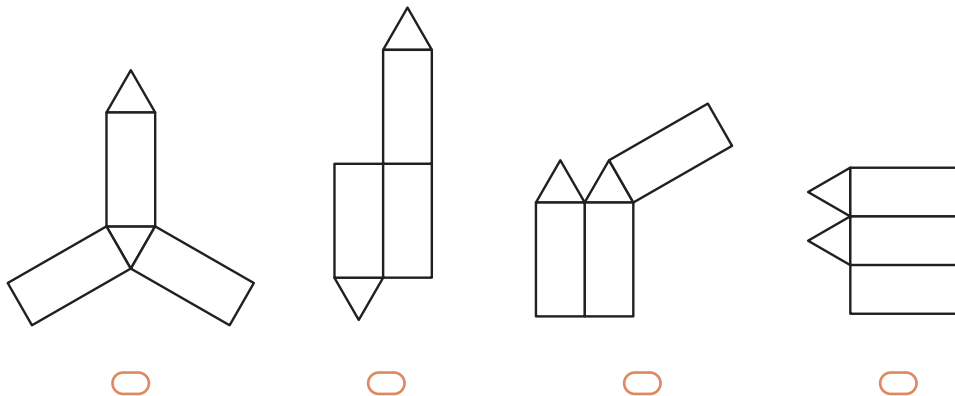
- 5 Which number is exactly halfway between  $1\frac{1}{4}$  and  $3\frac{3}{4}$  ?

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

- 6 This is a triangular prism.



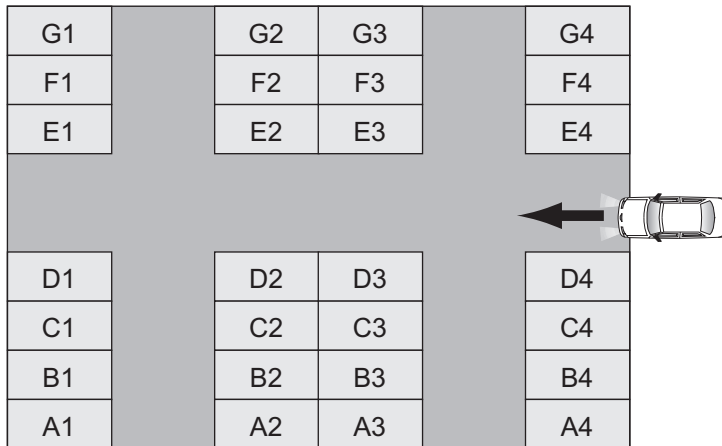
Which diagram is the net of a triangular prism?



# YEAR 7 NUMERACY

**7** This plan shows the parking spaces in a car park.

Shade one bubble.



Simon enters the car park at the arrow.

He takes the second turn on his left and parks in the third parking space on his right.

Which parking space is this?

A1

B1

G2

B2

**8** Cassie rode her bike for 30 seconds. She rode at a speed of 6 metres per second.

How far did she ride?

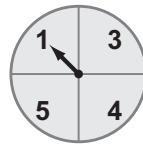
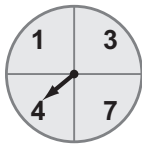
5 m

36 m

180 m

300 m

**9** Marie spins these two arrows. She adds the numbers in the sections where the arrows stop and gets a **total** of 5.



Marie then spins the arrows again. How many different ways can she get a **total** of 8?

1

2

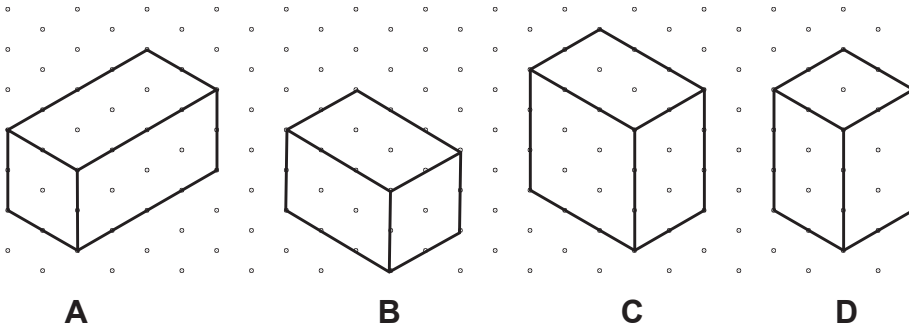
3

4

# YEAR 7 NUMERACY

- 10** These isometric drawings of some rectangular prisms are labelled A, B, C and D.

Shade one bubble.



Which two drawings are of the same rectangular prism?

A and B

B and C

C and A

B and D





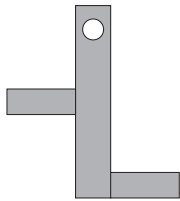
- 11** A car uses an average of 8 litres of fuel for every 100 km travelled. At this rate, how many litres would the car use to travel 250 km?

Write your answer in the box.

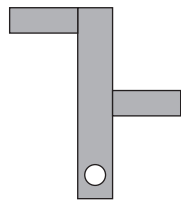

 litres

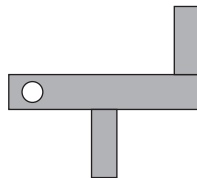
- 12** This shape turns around the white dot.

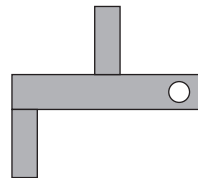
Shade one bubble.

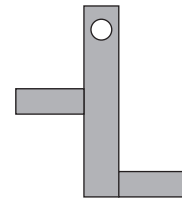


What does it look like after a three-quarter turn clockwise?



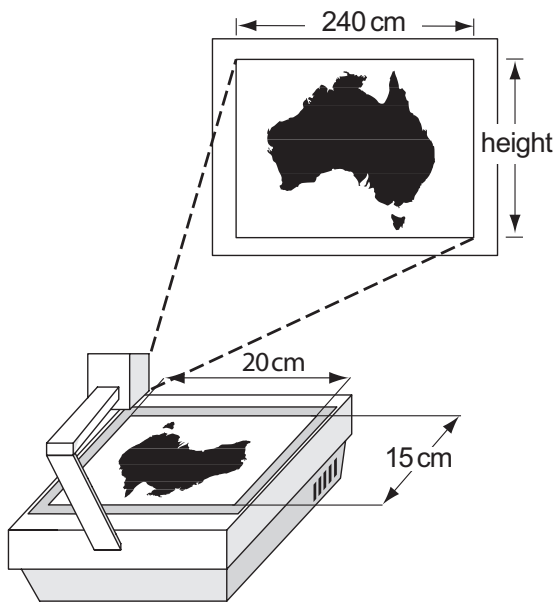






# YEAR 7 NUMERACY

- 13** A projector is used to enlarge this map on to a wall.



Shade one bubble.



What is the height of the enlarged map shown on the wall?

150 cm

180 cm

200 cm

300 cm

- 14** One-fifth of the length of Ruby's skipping rope is 30 cm.

Write your answer in the box.



How long is her rope?

cm

- 15** A school has 150 students.  
80 of the students each have a book on loan from the library.

Shade one bubble.



The fraction of students who have a book on loan from the library is closest to

one-fifteenth.

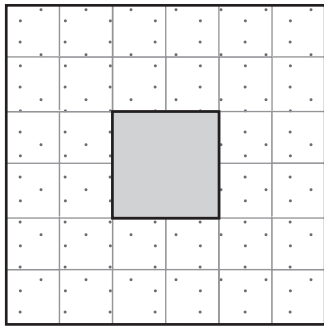
one-eighth.

one-quarter.

one-half.

# YEAR 7 NUMERACY

16 Here is a plan of Jim's backyard.



KEY	
	Paving
	Garden

Shade one bubble.



The area of the square garden in the middle is  $16 \text{ m}^2$ .

What is the area of the paving in Jim's backyard?

$20 \text{ m}^2$

$32 \text{ m}^2$

$128 \text{ m}^2$

$144 \text{ m}^2$

17 Kim paid \$1.50 for cherries at this price.

How many grams of cherries did she buy?



0.25 g

25 g

150 g

250 g

18 How many hours and minutes are between 2:27 am and 2:16 pm on the same day?

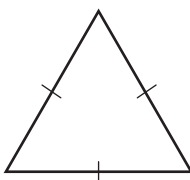
11 hours and 11 minutes

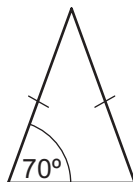
11 hours and 49 minutes

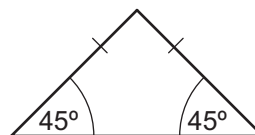
12 hours and 11 minutes

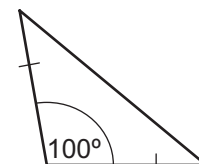
12 hours and 49 minutes

19 Which one of these is a right-angled isosceles triangle?





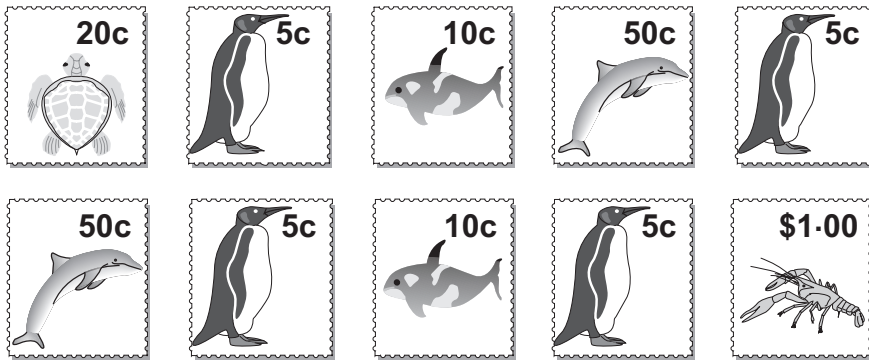





Not to scale

# YEAR 7 NUMERACY

**20** Miki turned these stamps over and mixed them up.



Shade one bubble.



He selects one at random.

What is the chance of Miki selecting a 5c stamp?

1 out of 4

1 out of 5

2 out of 5

4 out of 6

**21** A stack of cardboard sheets is 11.4 centimetres thick.  
Each sheet of cardboard is 0.03 centimetres thick.

Write the answer in the box.

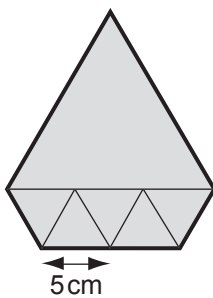


How many sheets of cardboard are in the stack?

sheets

**22** This shape is made from five small equilateral triangles and one large equilateral triangle.

Shade one bubble.



Each side of all the small triangles is 5 cm long.

What is the perimeter of the shape?

15 cm

45 cm

50 cm

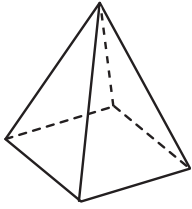
85 cm

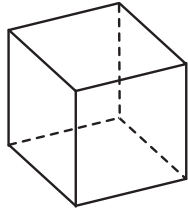


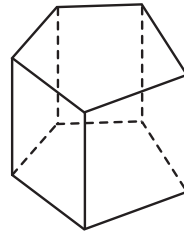
# YEAR 7 NUMERACY

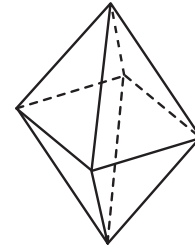
**23** Which object has exactly twice as many edges as faces?

Shade one bubble.










**24** Hugo's electricity bill was \$180 last month. This month it is \$135.

What percentage decrease is this?

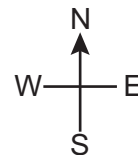
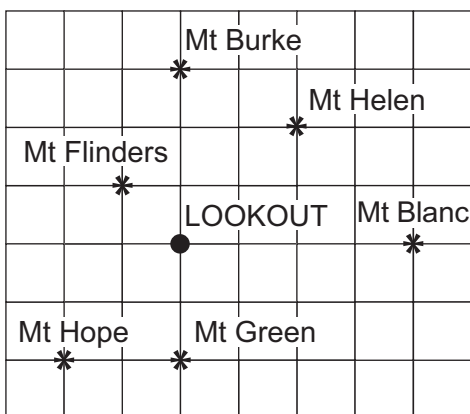
25%

33%

45%

55%

**25** This is a map of mountains in a national park.



KEY
* Mountain (Mt)
● LOOKOUT

Anna is at the Lookout facing South. She turns  $225^\circ$  in a **clockwise** direction.

Which mountain is Anna now facing?

Mt Helen

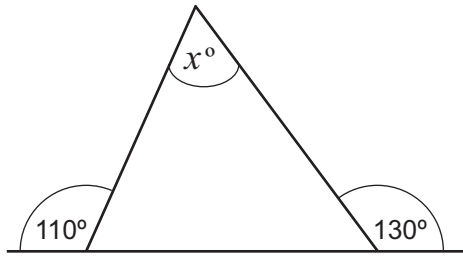
Mt Blanc

Mt Flinders

Mt Hope

# YEAR 7 NUMERACY

26



Not to scale

Shade one bubble.



What is the value of  $x$  in this diagram?

50

55

60

70

27

Niki uses 15 litres of water every minute when she has a shower. She uses 100 litres of water when she has a bath.

How many litres of water does she **save** by having a  $3\frac{1}{2}$  minute shower instead of a bath?

Write your answer in the box.



litres

28

There are 420 girls and boys at a concert. The ratio of girls to boys at the concert is 3 to 7.

How many girls are at the concert?

Shade one bubble.



126

140

180

294

29

Sally has 60 DVDs. This table shows the percentage of each type of DVD.

How many Comedy DVDs does Sally have?

Type of DVD	Percentage
Drama	45%
Sport	25%
Comedy	20%
Cartoons	10%

3

12

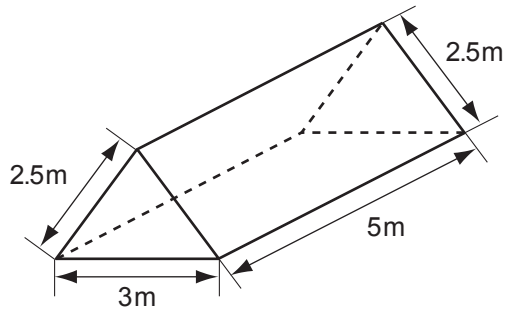
15

20

# YEAR 7 NUMERACY

- 30** This solid triangular prism needs all its faces painted.  
The area of each triangular face is  $3 \text{ m}^2$ .

Write your answer in the box.



Not to scale

What is the **total** area to be painted?

  $\text{m}^2$ 

- 31** 1 kilometre and 40 metres is the same as

Shade one bubble.



140 km

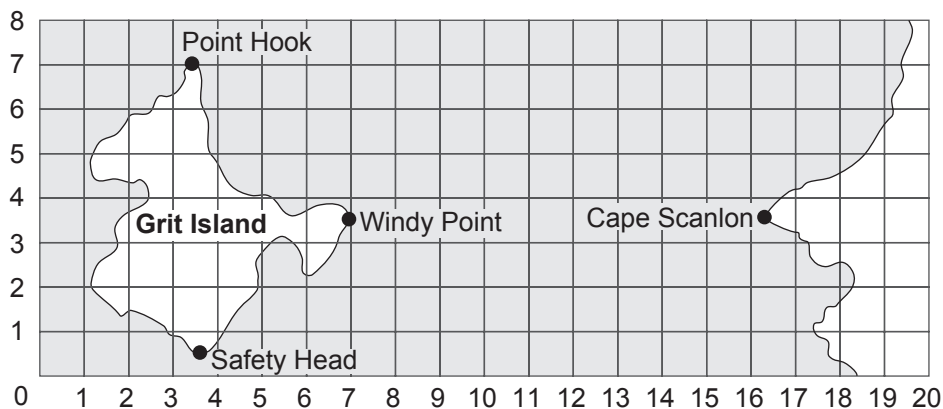
1.04 km

1004 m

1.40 m

- 32** Here is a map of Grit Island.

The shortest distance from Point Hook to Safety Head is 1300 m.



The shortest distance from Windy Point to Cape Scanlon is closest to

950 m

1700 m

1900 m

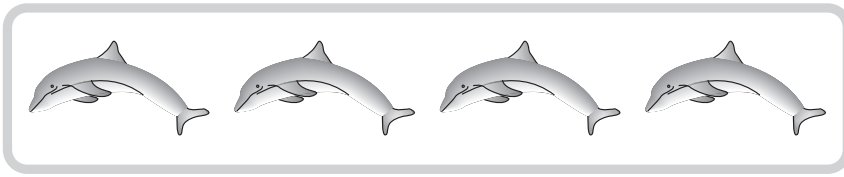
2250 m

## END OF TEST

# YEAR 7 NUMERACY PRACTICE QUESTIONS

**P1** How many dolphins are shown on this card?

Shade one bubble.



3

4

5

6

**P2**

$6 + 4 =$

Write your answer in the box.



**P3**

What is the total cost of these two stamps?



\$