



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

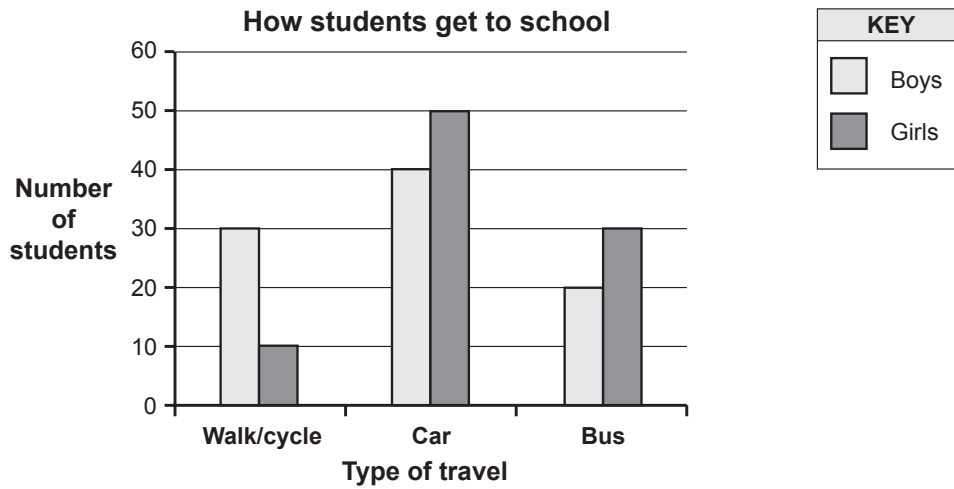
Use 2B or HB  
pencil **only**



# 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

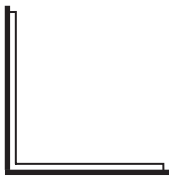
4706

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

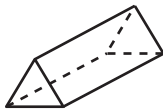
What was the average (mean) time for these walks?

- 40 minutes      52 minutes      65 minutes      260 minutes
- 

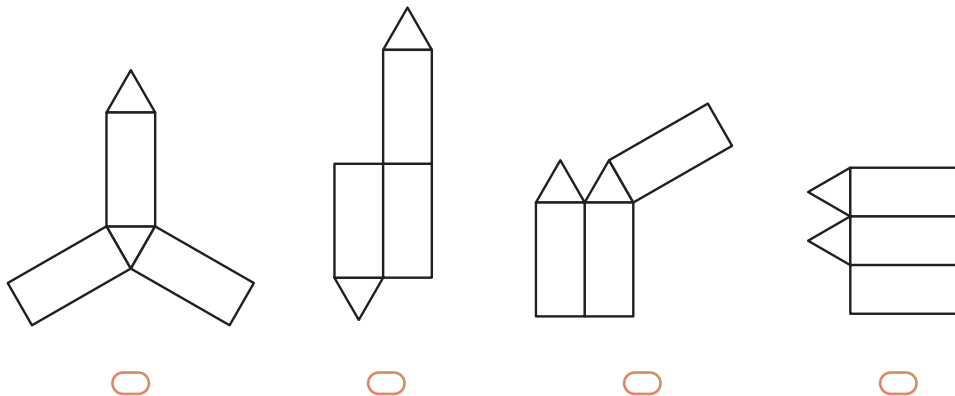
- 5 Which number is exactly halfway between  $1\frac{1}{4}$  and  $3\frac{3}{4}$  ?

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

- 6 This is a triangular prism.



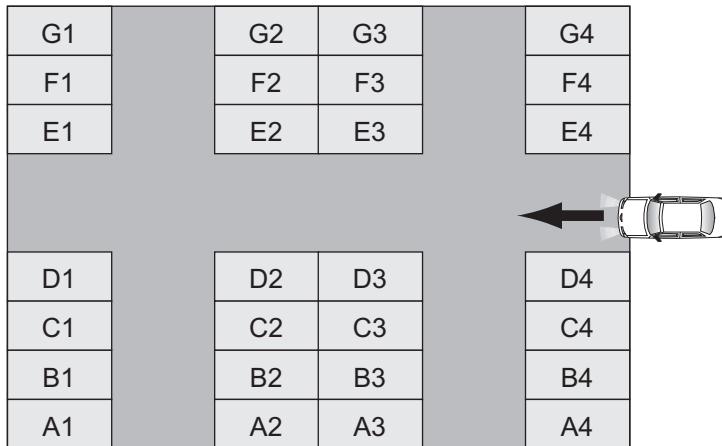
Which diagram is the net of a triangular prism?



# 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?

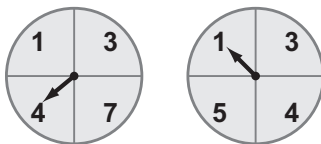
5 m

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

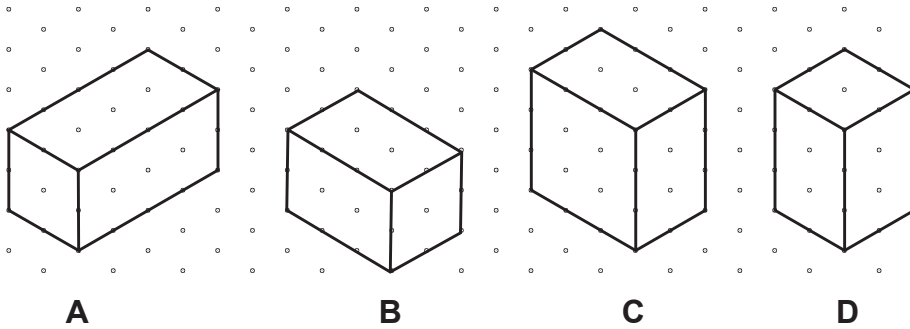
3

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?

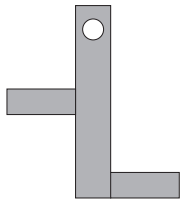
Write your answer in the box.



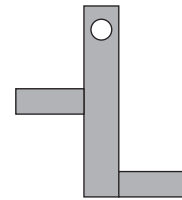
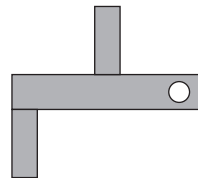
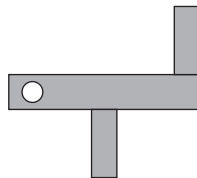
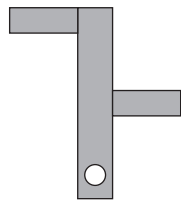

litres

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

Shade one bubble.

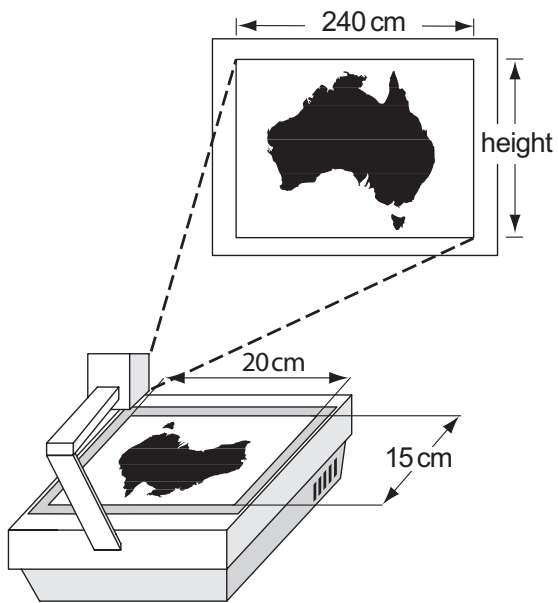


What does it look like after a three-quarter turn clockwise?



# 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.

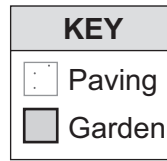
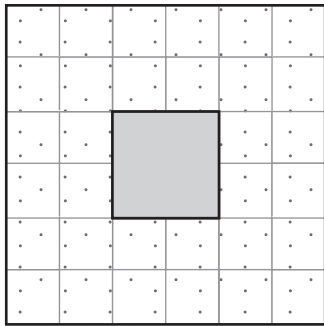
one-eighth.

one-quarter.

one-half.

# YEAR 7 NUMERACY

**16** Here is a plan of Jim's backyard.



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

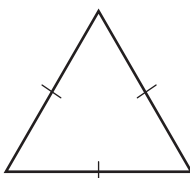
150 g

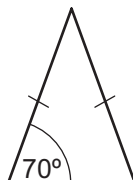
250 g

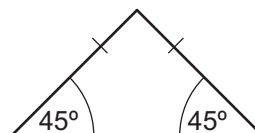
**18** How many hours and minutes are between 2:27 am and 2:16 pm on the same day?

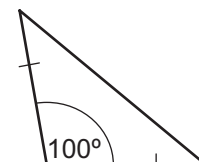
- 11 hours and 11 minutes
- 11 hours and 49 minutes
- 12 hours and 11 minutes
- 12 hours and 49 minutes

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





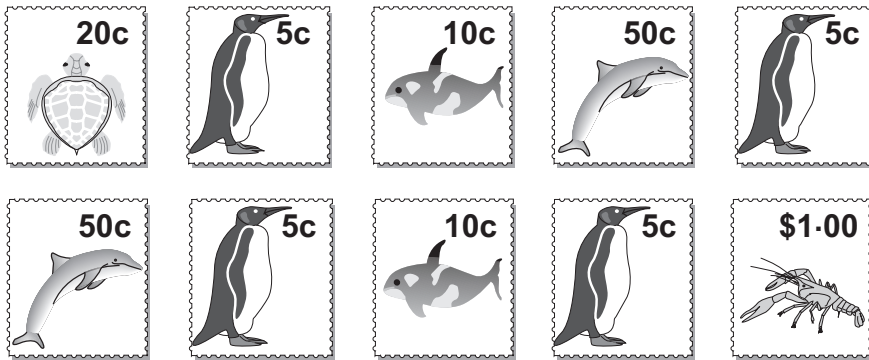





Not to scale

# 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.

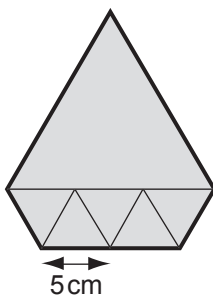


How many sheets of cardboard are in the stack?

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

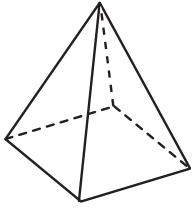
85 cm

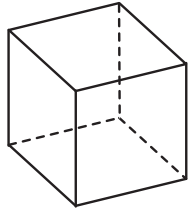


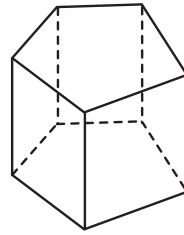
# YEAR 7 NUMERACY

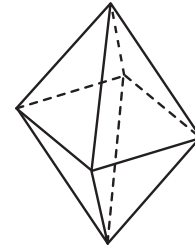
**23** Which object has exactly twice as many edges as faces?

Shade one bubble.










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

What percentage decrease is this?

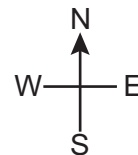
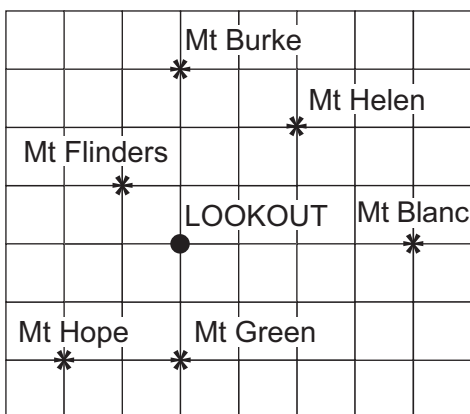
25%

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

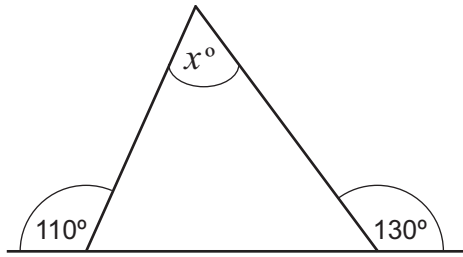
Mt Blanc

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

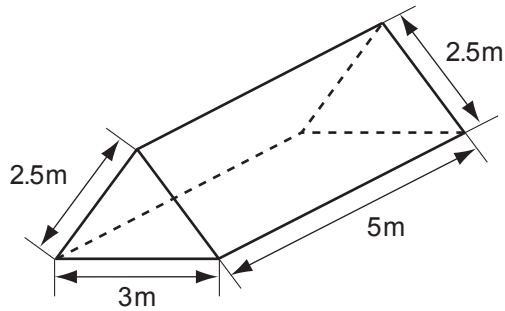
15

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

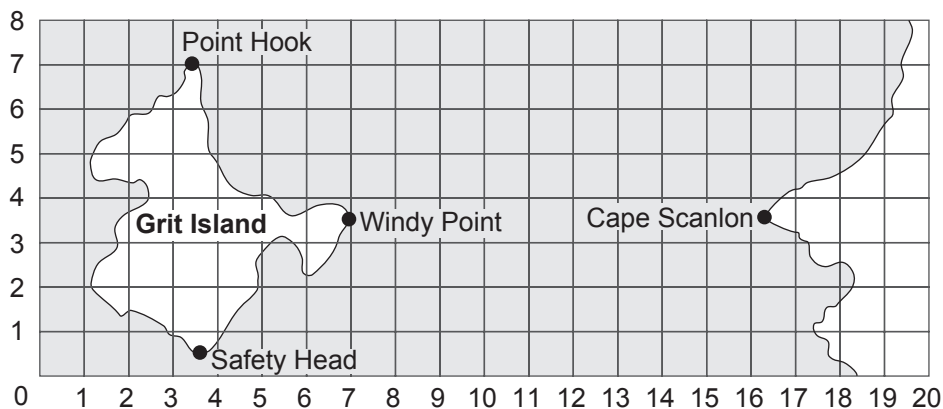
1.04 km

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

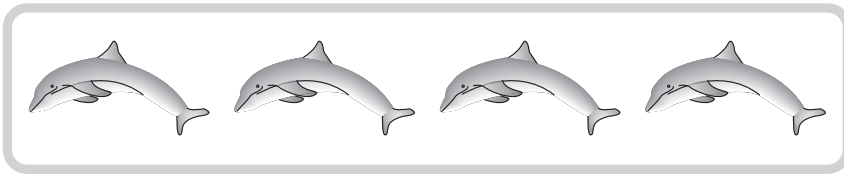
2250 m

## END OF TEST

# YEAR 7 NUMERACY PRACTICE QUESTIONS

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

Shade one bubble.



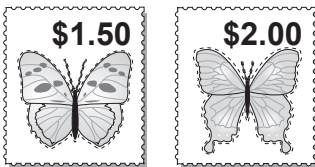
- 3                      4                      5                      6
- 

**P2**  $6 + 4 =$

Write your answer in the box.



**P3** What is the total cost of these two stamps?



\$



NATIONAL ASSESSMENT PROGRAM  
LITERACY AND NUMERACY

# NUMERACY NON-CALCULATOR



YEAR  
**7**

2008

**0:40**

## SESSION 1

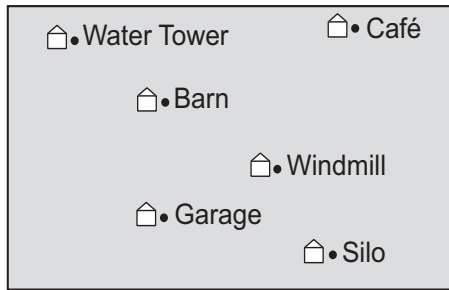
Time available for students to complete  
test: 40 minutes

Use 2B or HB  
pencil **only**



# YEAR 7 NUMERACY

1 This map shows the position of some of the buildings in the town of Bendy.



Shade one bubble.



Which building is West of the Windmill and North of the Barn?

Silo

Café

Garage

Water Tower

2



Which time is the same as the time shown on this digital clock?

2:30 am

2:30 pm

4:30 am

4:30 pm

3

Another way of writing  $6^2$  is

$6 \times 2$

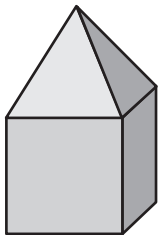
$6 \times 6$

$6 + 6$

$2 \times 2 \times 2 \times 2 \times 2 \times 2$

4

A square-based pyramid and a cube have been glued together.



How many **faces** does the new object have?

4

8

9

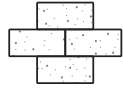
11

# YEAR 7 NUMERACY

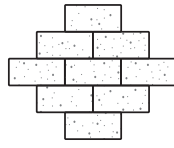
5 Jen is making this brick pattern.



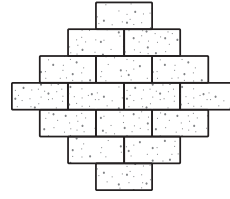
Shape 1



Shape 2



Shape 3



Shape 4

Shade one bubble.



This table shows the number of bricks she needs for each shape in her pattern.

Shape	1	2	3	4	5
Number of bricks	1	4	9	16	?

How many bricks are needed for Shape 5?

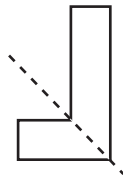
24

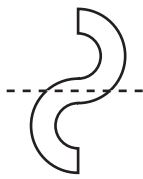
25

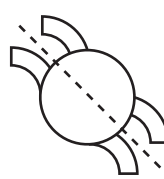
29

30

6 Which dotted line is a line of symmetry?










7 What is \$10 as a percentage of \$40?

4%

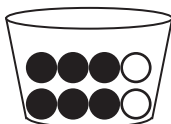
10%

25%

40%

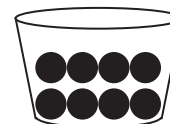
8 Lee takes one ball out of his bucket without looking. It is very likely, but not certain, that he will get a **black** ball.

Which is Lee's bucket?





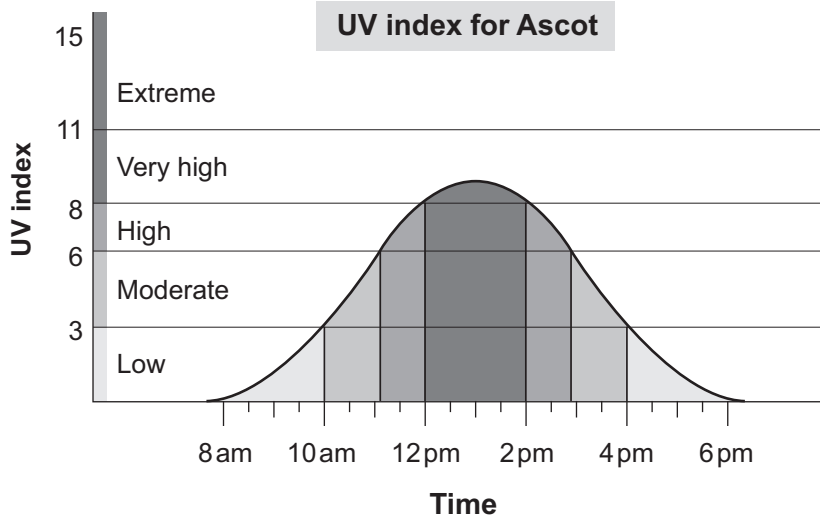




# YEAR 7 NUMERACY

9 This graph shows the UV index for the town of Ascot during one day.

Shade one bubble.



When was the UV index always in the low range?

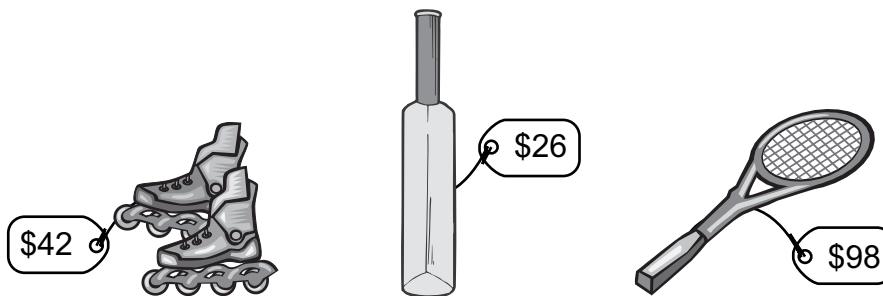
- between 8 am and 6 pm
- before 10 am and after 4 pm
- before 10 am only
- after 4 pm only

10 What is the missing number?

Write your answer in the box.

$$4 \times \boxed{\phantom{00}} = 8 \times 3$$

11



Shade one bubble.

What is the best way to estimate the total cost of these three objects?

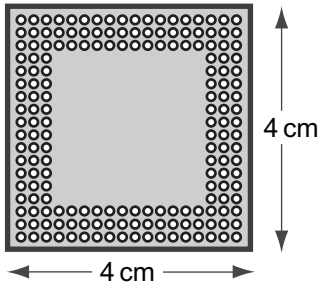
- \$40 + \$20 + \$90
- \$40 + \$20 + \$100
- \$40 + \$30 + \$90
- \$40 + \$30 + \$100



# YEAR 7 NUMERACY

- 12** A computer chip has dimensions  $8\text{ mm} \times 8\text{ mm}$ .  
A scale drawing is shown below.

Shade one bubble.



What scale is used in the drawing?

- 1 cm represents 5 mm
- 1 cm represents 2 mm
- 2 cm represents 1 mm
- 5 cm represents 1 mm

- 13** Which number is greater than 0.08?

0.1



0.009



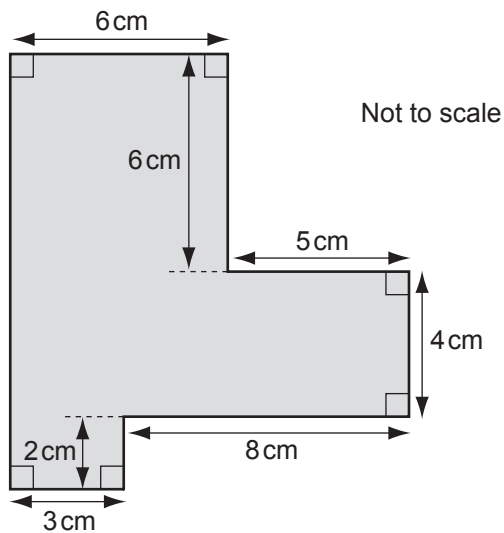
0.07



0.0089



- 14**



What is the perimeter of this shape?

34 cm



36 cm



46 cm



74 cm



# YEAR 7 NUMERACY

15 John is using this pancake recipe.

Pancake recipe	
Makes 8 pancakes	
Ingredients	
1 cup flour	
2 eggs	
1 cup milk	
$\frac{1}{2}$ cup sugar	
20g butter	

Shade one bubble.



How many cups of sugar are needed for 40 pancakes?

$2\frac{1}{2}$

4

5

20

16 There are 50 marbles in a bag. Ten marbles are red, the others are black. Emma picks a marble from the bag without looking.

What is the chance of her picking a red marble?

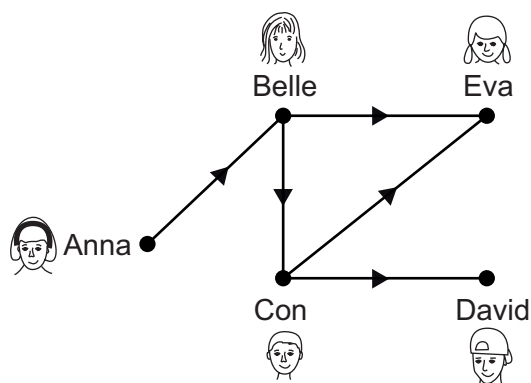
1 in 10

2 in 10

4 in 10

5 in 10

17 Five students compared their heights. This diagram shows their results.



Which student is the tallest?

Anna

Belle

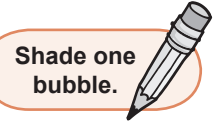
Con

David

Eva

# YEAR 7 NUMERACY

**18** This is a movie program.



PROGRAM		
Movie	Start time	Length
Blue Sky	10:00 am, 12:30 pm, 3:30 pm	1 hour 37 mins
Fuzzy Dog	3:00 pm, 7:00 pm	2 hours
The King	11:00 am, 2:15 pm, 6:00 pm	1 hour 40 mins
Kids at School	2:05 pm, 5:00 pm	2 hours 30 mins

Gina arrives at the movie theatre at 2:00 pm. Her mother will pick her up at 4:00 pm.

Which movie could Gina watch from start to finish?

Blue Sky

Fuzzy Dog

The King

Kids at School

**19** Which fraction has the same value as  $2\frac{3}{4}$ ?

$$\frac{8}{4}$$

$$\frac{9}{4}$$

$$\frac{11}{4}$$

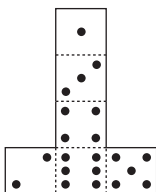
$$\frac{14}{4}$$

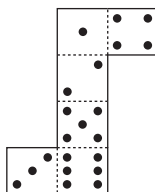
**20** Here is a standard die.

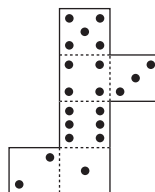
The sum of the dots on opposite faces is 7.

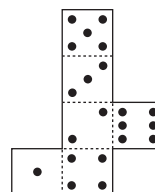


Which is the net of this die?



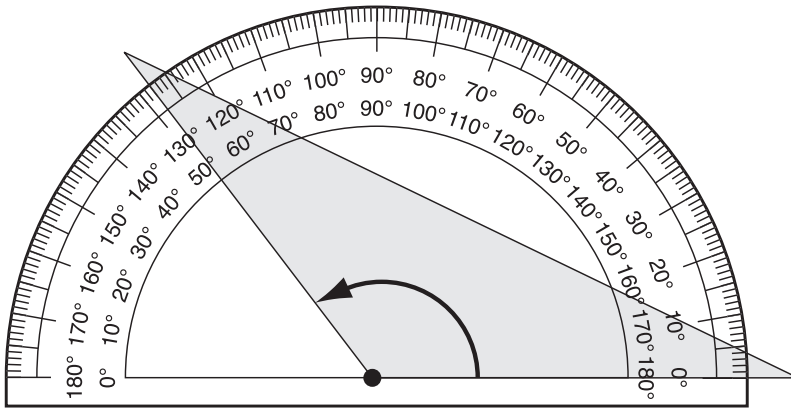






# YEAR 7 NUMERACY

21



Write your answer in the box.



What is the size of the angle in the shaded triangle marked by the arrow?

degrees

22 This table shows the results of a survey on mobile phone bills.

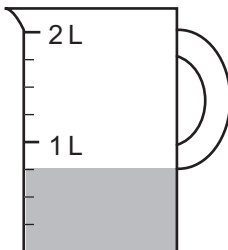
Monthly bill

Age	\$20 or less	Greater than \$20 and less than \$30	\$30 or more
Under 20	12	28	18
20 – 40	8	14	13
Over 40	15	17	12

In total, how many people under the age of 20 had a monthly bill of **less than \$30**?

people

23 This jug has some milk in it.



If Eve adds an extra 500 mL of milk to the jug, how many millilitres (mL) of milk will then be in the jug?

mL

# YEAR 7 NUMERACY

**24** Ann recorded the colour of 50 cars in this table.

Car colour	Number of cars
White	25
Blue	4
Yellow	5
Red	?
<b>TOTAL</b>	<b>50</b>

Write your answer in the box.



What percentage of the cars is red?

 %

**25** A garden centre sells a potting mix made up of soil, compost and sand.

Soil makes up  $\frac{2}{3}$  of the mix and compost makes up  $\frac{1}{4}$  of the mix.

What fraction of the potting mix is sand?

Shade one bubble.



$\frac{1}{12}$

$\frac{3}{7}$

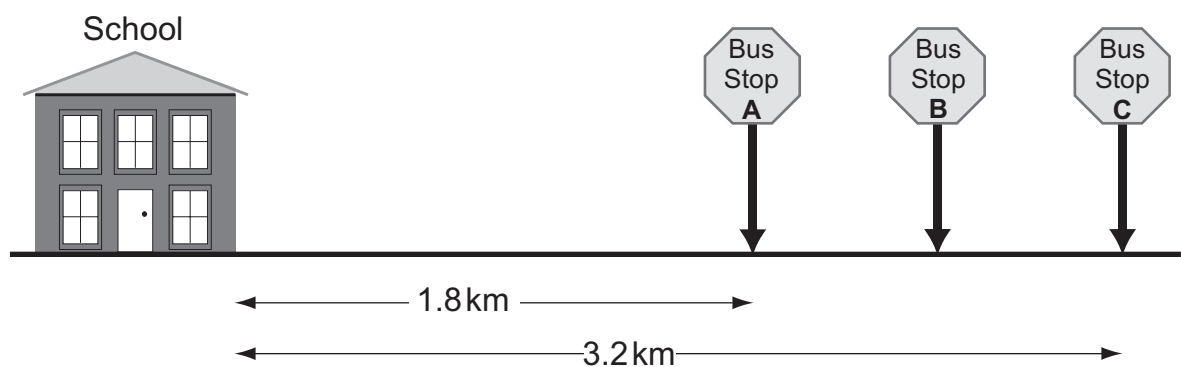
$\frac{5}{12}$

$\frac{4}{7}$

**26** This picture shows the position of three bus stops on the road leading to a school.

Bus Stop B is **exactly halfway** between Bus Stop A and Bus Stop C.

Write your answer in the box.

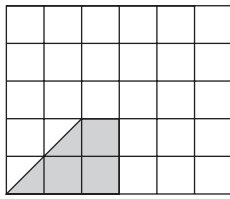


What is the distance between the **School** and **Bus Stop B**?

 km

# YEAR 7 NUMERACY

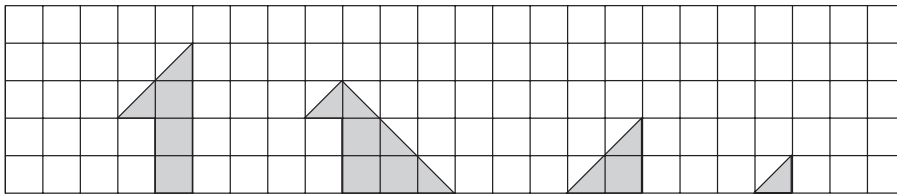
**27** Tara drew this shape on square grid paper.



Shade one bubble.



Which one of the shapes below, when joined (with no overlap) with Tara's shape, will **not** make a right-angled triangle?



**28** What is the answer to  $6.6 \div 0.3$ ?

0.022

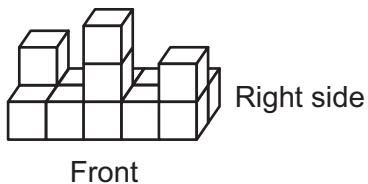
0.22

2.2

22

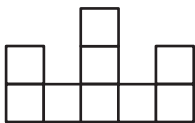


**29** This object was made using identical cubes.



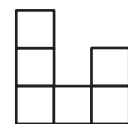
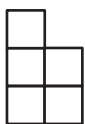
Front

This is a drawing of the view from the front.



Front view

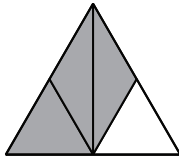
Which drawing shows the view from the right side?

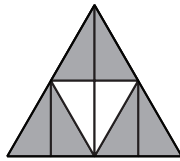


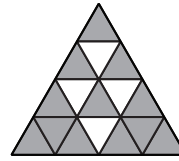
# YEAR 7 NUMERACY

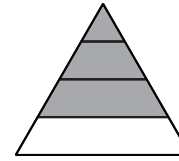
**30** Which diagram does **not** have  $\frac{3}{4}$  of the area shaded?

Shade one bubble.










**31** Ben puts 7 flowers in each of 8 vases.  
He has 3 flowers left over.  
Ben wants to put 9 flowers in each vase.

Write your answer in the box.



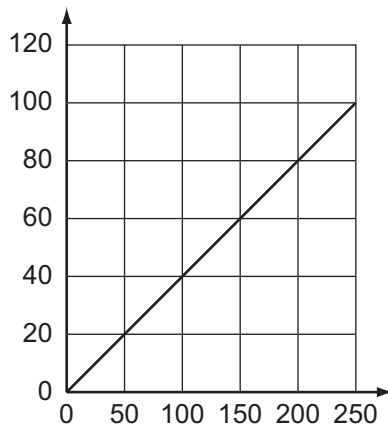
How many **more** flowers does he need?

flowers

**32** Alex uses these two conversion graphs.

**Australian dollars to British pounds**

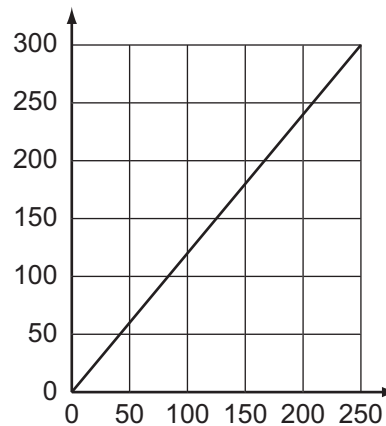
British pounds



Australian dollars

**Australian dollars to Brunei dollars**

Brunei dollars



Australian dollars

How many Brunei dollars are equal in value to 50 British pounds?

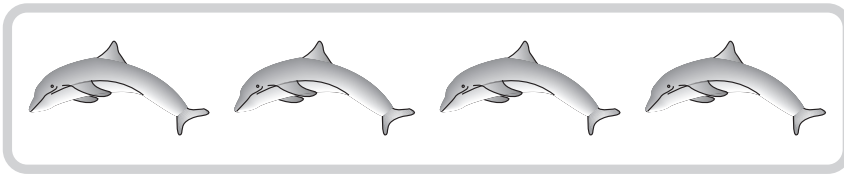
Brunei dollars

## 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?



\$



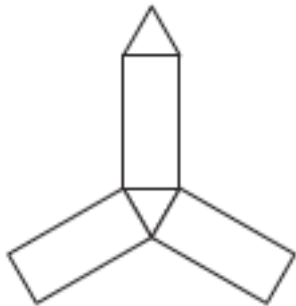
# NAPLAN Numeracy (with calculator) Year 7 2008

## Quick Answers

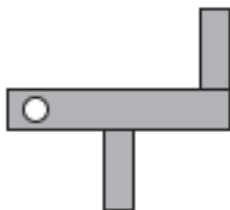
- 40
- 4076
- 



- 52 minutes
- $2\frac{1}{2}$
- 

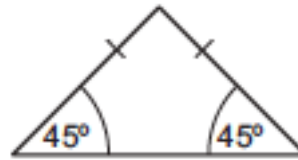


- B1
- 180 m
- 3
- B and D
- 20 litres
- 

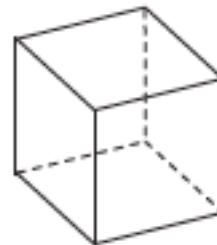


- 180 cm
- 150 cm
- one-half.
- $128 \text{ m}^2$

- 250 g
- 11 hours and 49 minutes
- 



- 2 out of 5
- 380
- 50 cm
- 

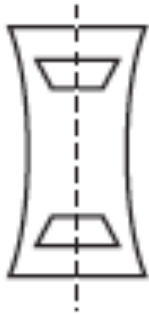


- 25%
- Mt Helen
- 60
- 47.5 litres
- 126
- 12
- $46 \text{ m}^2$
- 1.04 km
- 1900 m

# NAPLAN Numeracy (non calculator) Year 7 2008

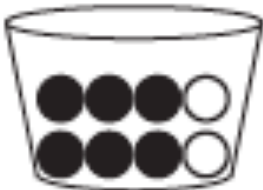
## Quick Answers

1. Water Tower
2. 2:30 pm
3.  $6 \times 6$
4. 9
5. 25
- 6.



7. 25%

8.



9. before 10 am and after 4 pm

10. 6

11.  $\$40 + \$30 + \$100$

12. 1 cm represents 2 mm

13. 0.1

14. 46 cm

15.  $2\frac{1}{2}$

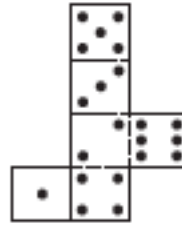
16. 2 in 10

17. Anna

18. The King

19.  $\frac{11}{4}$

20.



21. 128 degrees

22. 40 people

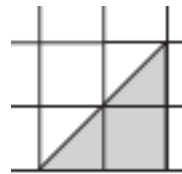
23. 1250 mL

24. 32%

25.  $\frac{1}{12}$

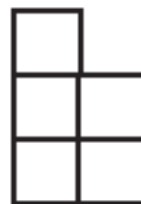
26. 2.5 km

27.

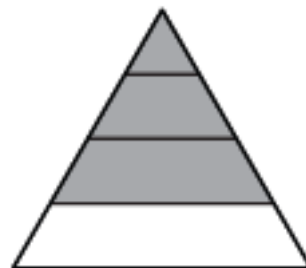


28. 22

29.



30.



31. 13 flowers

32. 150 Brunei dollars