



NATIONAL ASSESSMENT PROGRAM  
LITERACY AND NUMERACY

# NUMERACY NON-CALCULATOR



YEAR

**7**

2008

## TEST INSTRUCTIONS

1. You must do your own work.
2. Do not speak to other students during the test.
3. Raise your hand if you need to speak to the teacher.
4. Follow all directions given to you by the teacher.
5. All questions must be answered using the pencil you have been given. If you need to change an answer, carefully erase it and write another answer.
6. You are NOT permitted to use a calculator of any type.
7. To confirm you have the correct booklet, print your name below.

Print your name here:

**0:40**

### SESSION 1

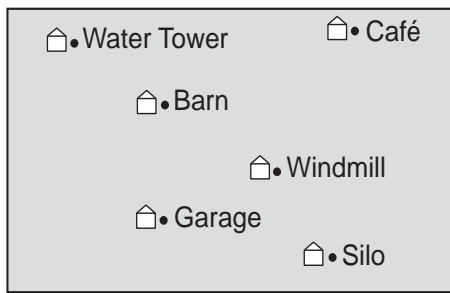
Time available for students to complete  
test: 40 minutes

Use 2B  
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

14:30

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

$6 \times 2$

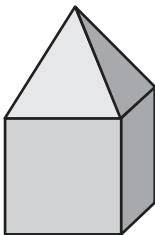
$6 \times 6$

$6 + 6$

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

4

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



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

4

8

9

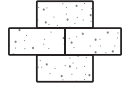
11

# YEAR 7 NUMERACY

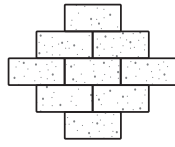
5 Jen is making this brick pattern.



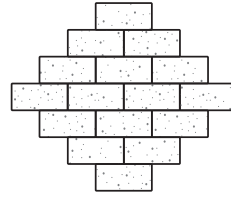
Shape 1



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

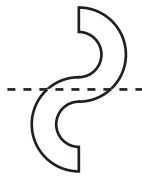
25

29

30

6 Which dotted line is a line of symmetry?










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

4%

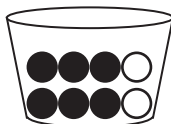
10%

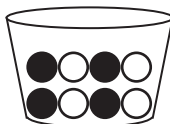
25%

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?





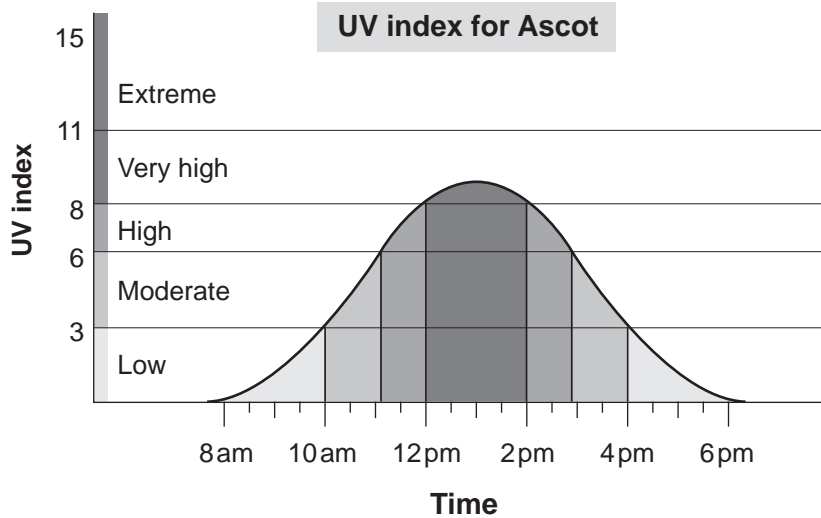




# YEAR 7 NUMERACY

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?

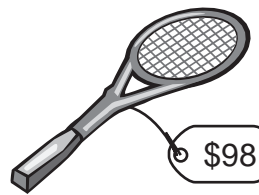
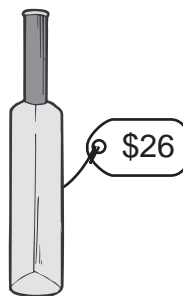
- between 8 am and 6 pm
- before 10 am and after 4 pm
- before 10 am only
- after 4 pm only

10 What is the missing number?

Write your answer in the box.

$$4 \times \boxed{\phantom{000}} = 8 \times 3$$

11



Shade one bubble.

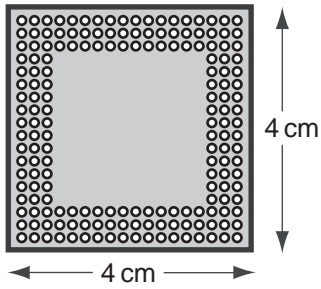
What is the best way to estimate the total cost of these three objects?

- \$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



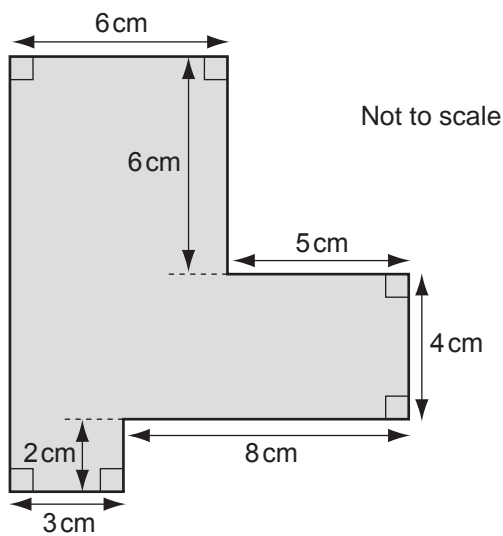
0.07



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?

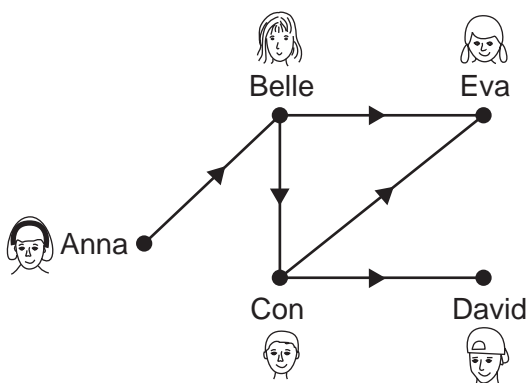
1 in 10

2 in 10

4 in 10

5 in 10

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



KEY

→ is taller than

Which student is the tallest?

Anna

Belle

Con

David

Eva

# YEAR 7 NUMERACY

18 This is a movie program.

Shade one bubble.



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  $2\frac{3}{4}$ ?

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

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

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

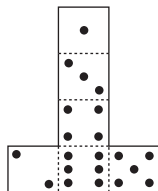
$$\frac{14}{4}$$

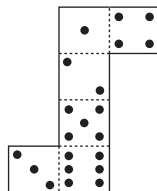
20 Here is a standard die.

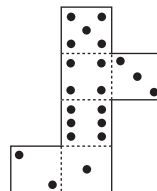
The sum of the dots on opposite faces is 7.

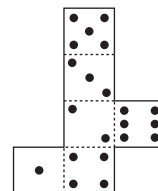


Which is the net of this die?



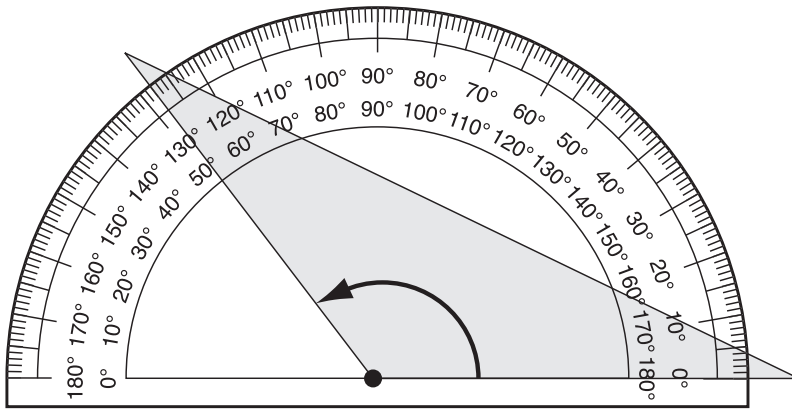






# YEAR 7 NUMERACY

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**

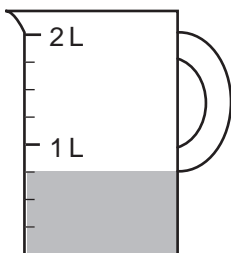
Age	\$20 or less	Greater than \$20 and less than \$30	\$30 or more
Under 20	12	28	18
20 – 40	8	14	13
Over 40	15	17	12

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?

$\frac{1}{12}$

$\frac{3}{7}$

$\frac{5}{12}$

$\frac{4}{7}$

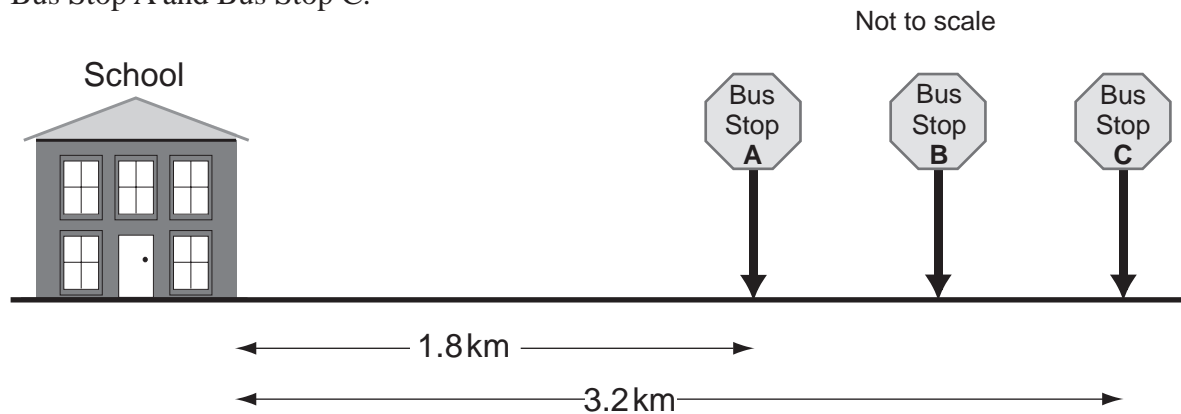
Shade one bubble.



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.

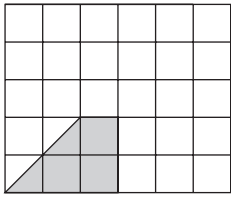


What is the distance between the **School** and **Bus Stop B**?

km

# YEAR 7 NUMERACY

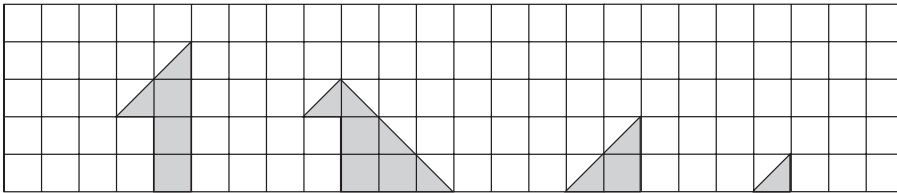
27 Tara drew this shape on square grid paper.



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



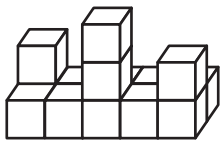
2.2



22



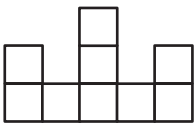
29 This object was made using identical cubes.



Right side

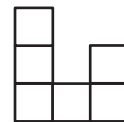
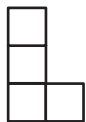
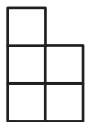
Front

This is a drawing of the view from the front.



Front view

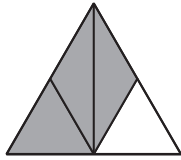
Which drawing shows the view from the right side?

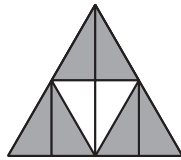


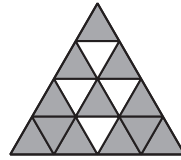
# YEAR 7 NUMERACY

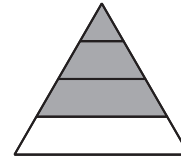
30 Which diagram does **not** have  $\frac{3}{4}$  of the area shaded?

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.



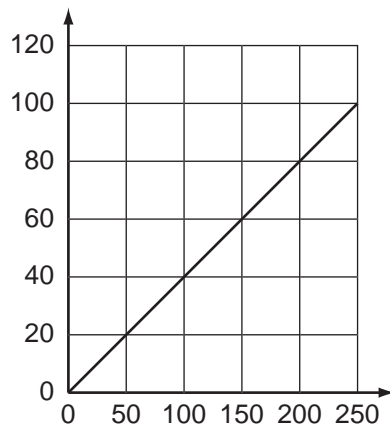
How many **more** flowers does he need?

flowers

32 Alex uses these two conversion graphs.

**Australian dollars to British pounds**

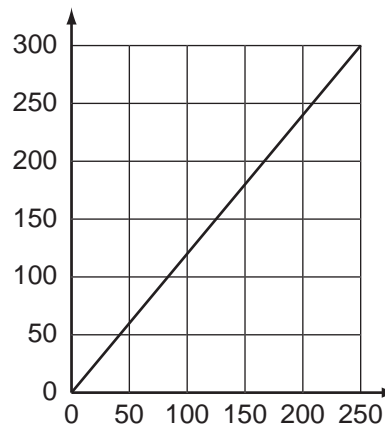
British pounds



Australian dollars

**Australian dollars to Brunei dollars**

Brunei dollars



Australian dollars

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

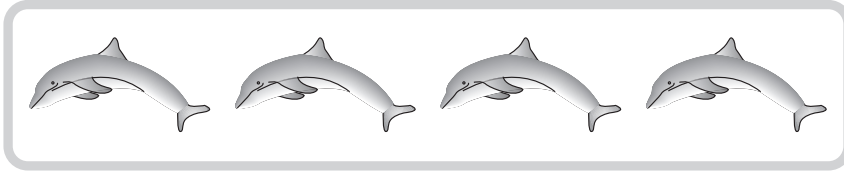
Brunei dollars

## 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?



\$