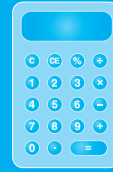


# NUMERACY

## CALCULATOR ALLOWED



YEAR

7

Example test



SESSION 1

**0:40**

Time available for students to  
complete test: 40 minutes

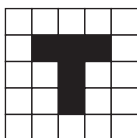
Use 2B or HB  
pencil only





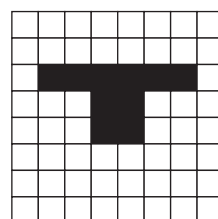
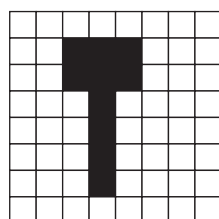
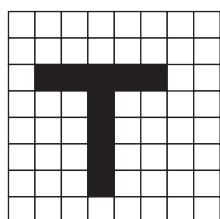
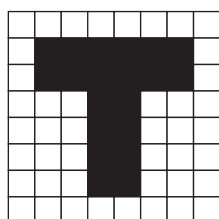
1

Trevor drew this shape on a grid.



He then doubled the height and width of the shape.

Which drawing shows this?



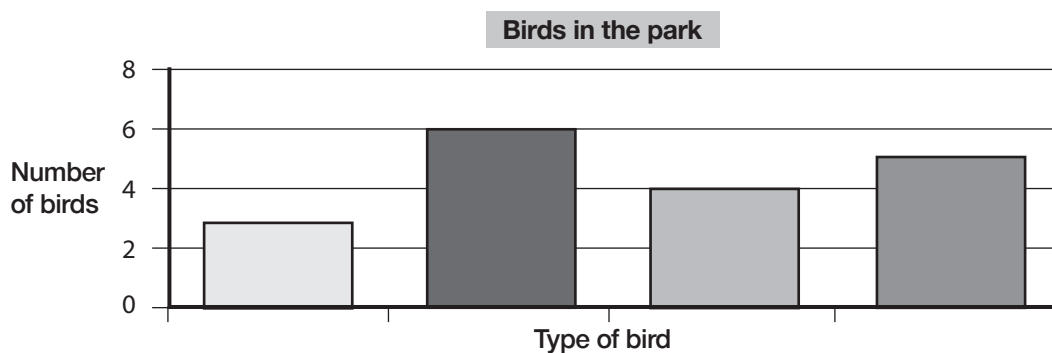
2

For 3 days, Bella made a tally of the birds she saw in a park.

This table shows her results.

| Type of bird | Monday | Tuesday | Wednesday |
|--------------|--------|---------|-----------|
| Kookaburra   |        |         |           |
| Magpie       |        |         |           |
| Galah        |        |         |           |
| Rosella      |        |         |           |

Which column on the graph below shows the total number of Galahs?





**3** In 1894, women were granted the right to vote in South Australia.

By 2009, women in South Australia will have been able to vote for

113 years.

115 years.

125 years.

215 years.

**4** Two places are 4.7 cm apart on a map.  
On the map 1 cm represents 5 km.

What is the actual distance between the two places?

1.06 km

9.4 km

23.5 km

47 km

**5** Emma has \$1.25 in coins.

What is the **least** number of coins she can have?

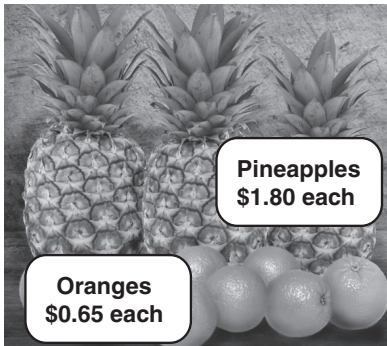
2

3

4

5

**6**

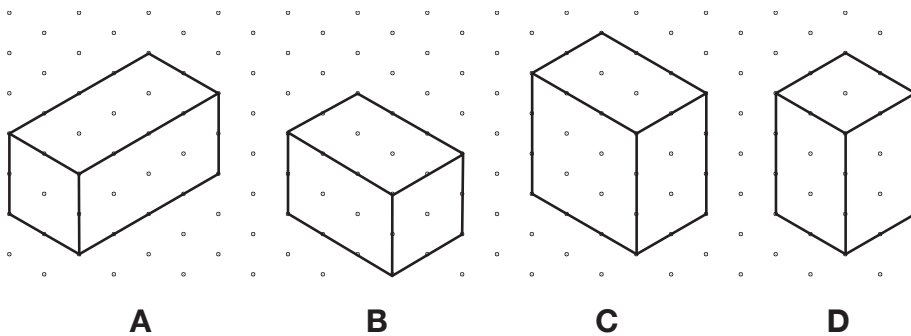


Alan buys 5 oranges and one pineapple from this market stall.

How much does Alan pay for the fruit altogether? \$



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



Which two drawings are of the same rectangular prism?

A and B

B and C

C and A

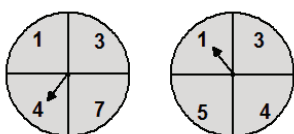
B and D

8 Sean wrote a number on a piece of paper.

If he multiplied his number by 5 and then divided by 2, the answer would be 30.

What was Sean's number?

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

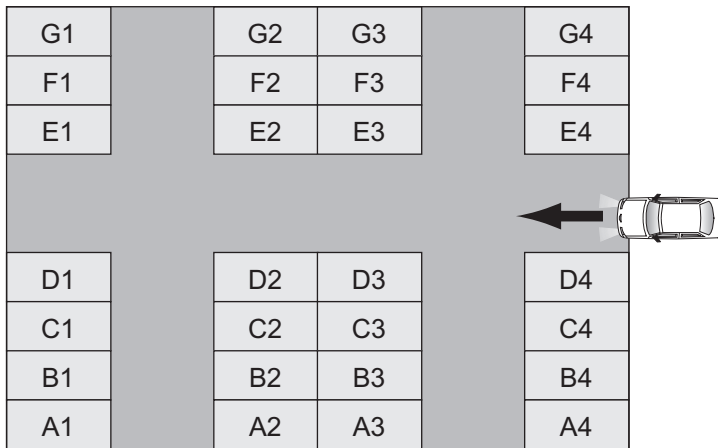
3

4



10

This plan shows the parking spaces in a car park.



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

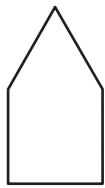
B2

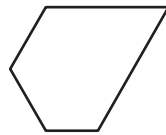
11

Luke drew a shape with:

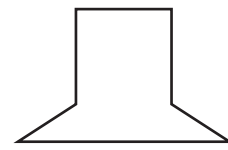
- exactly 2 pairs of parallel sides, and
- exactly 2 acute angles.

Which drawing could be Luke's?



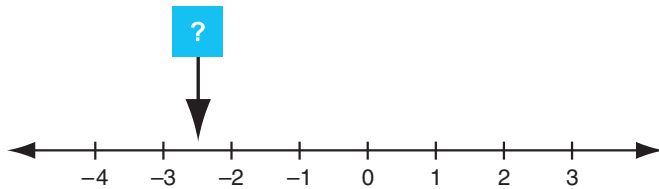








12

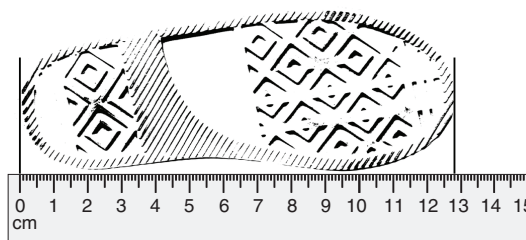


The arrow points to a position on the number line.

What number is at this position?

13

Trudie measured her footprint.  
She then measured her shoe print.



How much longer is her shoe than her foot?

0.08 cm

0.8 mm

8 mm

8 cm

14

The DVD player shows the time of day as 01:43.  
The movie still has 53 minutes to run.



What time will the DVD player show at the end of the movie?

15

A water tank has a capacity of 6.25 kilolitres.

How many litres does the water tank hold when it is full?

625

6025

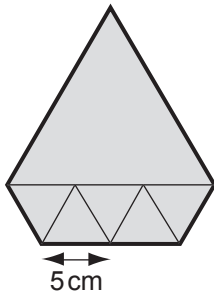
6250

62500



16

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



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

17

Last year 3684 people went to a music festival.

The number of people who went to the festival this year was  $\frac{2}{3}$  of last year's figure.

How many people went to the festival this year?

1228

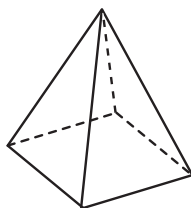
2442

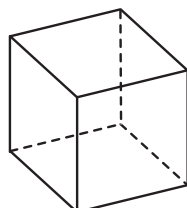
2456

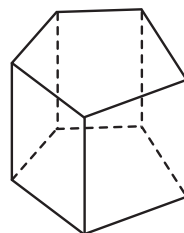
5526

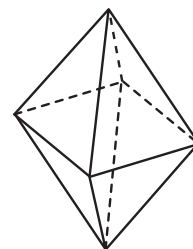
18

Which object has exactly twice as many edges as faces?











19

Dustin collects football cards.  
He sells some of his cards. The prices are listed here.  
\$3, \$5, \$5, \$8, \$8, \$10, \$10, \$10, \$40

What is their mean (average) price?

\$8

\$9

\$10

\$11

20

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

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

How many Comedy DVDs does Sally have?

3

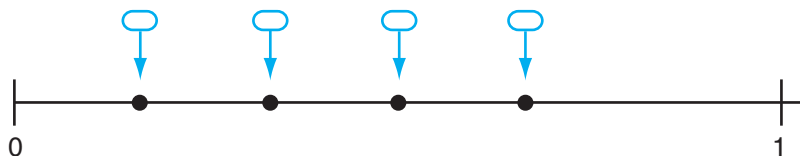
12

15

20

21

Kim throws a standard 6-sided die.  
Which point on the number line best shows the chance of Kim throwing a 2?



22

Zoe bought a bike on sale at 15% off the original price.  
The original price was \$420.  
How much did Zoe pay for the bike?

\$63

\$357

\$378

\$405

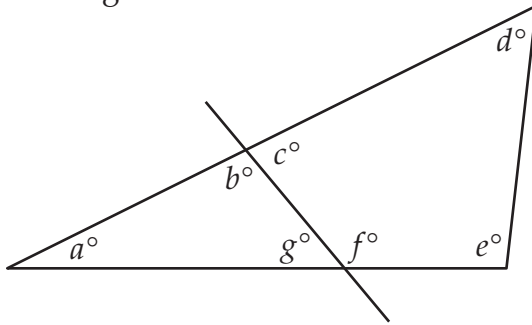




23

A triangle is divided into 2 parts by a straight line.

The angles are then labelled.



Which statement is true about the sum of angles?

- $a + b + c = 180$
- $c + d + e + f = 360$
- $a + b + g = 360$
- $a + g + f + e = 180$

24

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

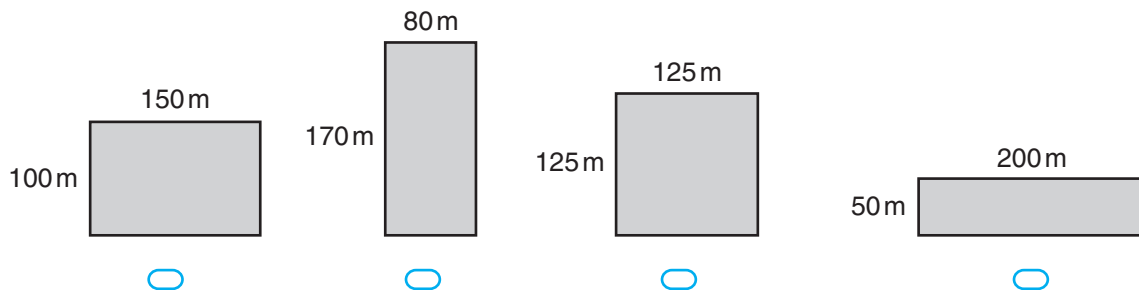
How many litres of water does she save by having a  $3\frac{1}{2}$  minute shower instead of a bath?

litres

25

A farm has 4 paddocks.

Which paddock has the largest area?





26

An electrician calculates the price of a job using a service fee and an amount per hour.

This table shows some of the job prices.

| Hours     | 2     | 4     | 5     | 6     |
|-----------|-------|-------|-------|-------|
| Job price | \$160 | \$252 | \$298 | \$344 |

How are the job prices calculated?

- \$80 service fee + \$40 per hour
- \$80 service fee + \$80 per hour
- \$68 service fee + \$92 per hour
- \$68 service fee + \$46 per hour

27

A rule to calculate the amount of medicine (mL) a child needs is:

$$\text{Child amount} = (\text{Adult amount} \times \text{Age of child}) \div (\text{Age of child} + 12)$$

Use this rule to complete the table.

| Adult amount (mL) | Age of child (years) | Child amount (mL) |
|-------------------|----------------------|-------------------|
| 10                | 8                    |                   |

28

Jamie surveyed all the Year 7 students at his school about their favourite sport.

| Favourite sport | Number of students |
|-----------------|--------------------|
| Basketball      | 85                 |
| Cricket         | 35                 |
| Football        | 55                 |
| Netball         | 75                 |

Which sport did 3 out of every 10 Year 7 students choose as their favourite?

Basketball

Cricket

Football

Netball



29 Which of these numbers is a multiple of both 7 and 11?

711

777

7117

7777

30 A shoe shop has a sale.



Was \$95  
Sale price is 20% off



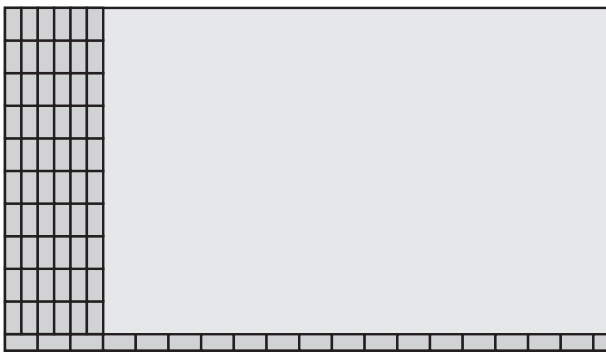
Was \$90  
Sale price is 25% off

What is the difference in the sale prices of these two pairs of shoes?

\$

31 Dan has started to cover a rectangular floor with tiles. The tiles are twice as long as they are wide.

The floor is  $10\frac{1}{2}$  tiles wide and  $18\frac{1}{2}$  tiles long.



Using this pattern, what is the total number of tiles Dan will use to cover the floor?



32

A plane was flying due north. It made these three course changes:

1.  $15^\circ$  right turn
2.  $50^\circ$  left turn
3. a final right turn until it was heading due east.

How many degrees did it turn the third time?

degrees

**STOP – END OF TEST**

# YEAR 7 NUMERACY (NON-CALCULATOR)



1

Which one of these has the same value as  $12 \times 3$  ?

$10 + 3 + 2$

$10 \times 3 + 2$

$10 \times 3 + 3$

$10 \times 3 + 6$

2

Nick multiplied 38 by 76 on his calculator.

The answer shown was 2888.

Nick then pressed four more buttons.

The answer shown was now 38.

Which four buttons could Nick have pressed to get 38?

$+ 7 6 =$

$- 7 6 =$

$\times 7 6 =$

$\div 7 6 =$



3

The table shows the times of 3 of the first 4 swimmers in a race.

|           |               |
|-----------|---------------|
| 1st place | 25.38 seconds |
| 2nd place | 25.83 seconds |
| 3rd place | ?             |
| 4th place | 26.29 seconds |

The time of the swimmer in 3rd place could be

25.78 seconds.

25.91 seconds.

26.31 seconds.

26.92 seconds.

4

Another way of writing  $6^2$  is

$6 \times 2$

$6 \times 6$

$6 + 6$

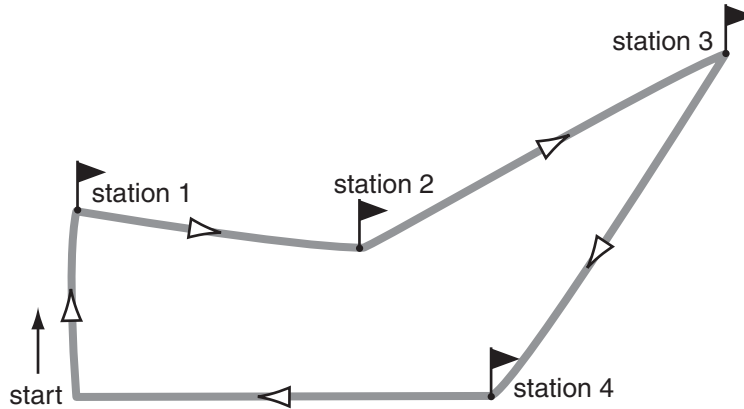
$2 \times 2 \times 2 \times 2 \times 2 \times 2$



5

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

6

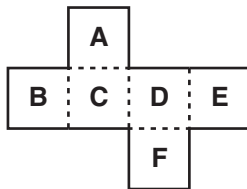
3.25, 3.0, 2.75, 2.5, 2.25, ...

What is the rule to continue this decimal number pattern?

- increase by 0.5
- increase by 0.25
- decrease by 0.5
- decrease by 0.25

7

Hannah folds this net to make a cube.



Which face is opposite face C?

# YEAR 7 NUMERACY (NON-CALCULATOR)



8

A rectangular paddock has a perimeter of 50 metres.  
Each long side has a length of 15 metres.

What is the length of each short side?

metres

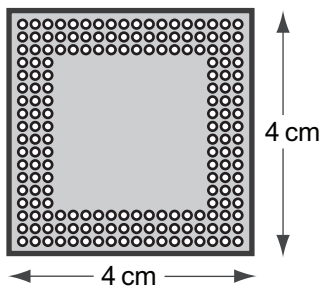
9

A number is multiplied by itself and then 9 is added.  
The answer is 13.

What is the number?

10

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



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

11

Jenny is exactly 3 years old.  
Her brother Ken is exactly 17 months old.

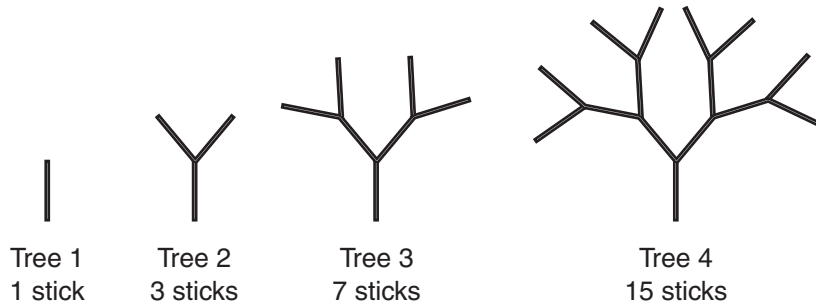
How many months older than Ken is Jenny?

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



12

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

13

Bruce is cooking dinner.  
The table shows the cooking times for his dinner.

|          | Cooking time      |
|----------|-------------------|
| Chicken  | 1 hour 40 minutes |
| Potatoes | 20 minutes        |
| Peas     | 10 minutes        |

Bruce starts cooking the chicken at 5:10 pm.  
He wants everything to finish cooking at the same time.

At what time should Bruce start cooking the peas?

6:20 pm

6:30 pm

6:40 pm

6:50 pm

14

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

4%

10%

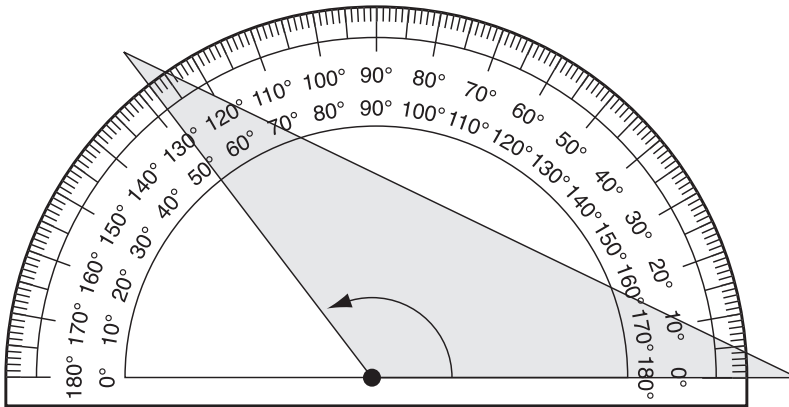
25%

40%





15



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

degrees

16

Helen has 24 red apples and 12 green apples.

What fraction of the apples are green?

$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{4}$

$\frac{1}{12}$

17

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

**Monthly bill**

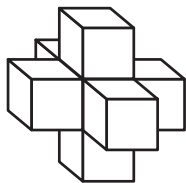
| Age      | \$20 or less | Greater than \$20 and less than \$30 | \$30 or more |
|----------|--------------|--------------------------------------|--------------|
| Under 20 | 12           | 28                                   | 18           |
| 20 – 40  | 8            | 14                        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

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



18

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



How many faces are painted?

19

These are four number cards.



Use each card once to make this number sentence true.

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

20

$$37.9 \times 10 =$$

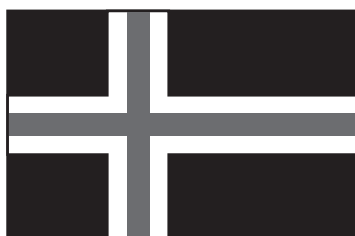
3790

3709

37.90

379

21



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

4

3

2

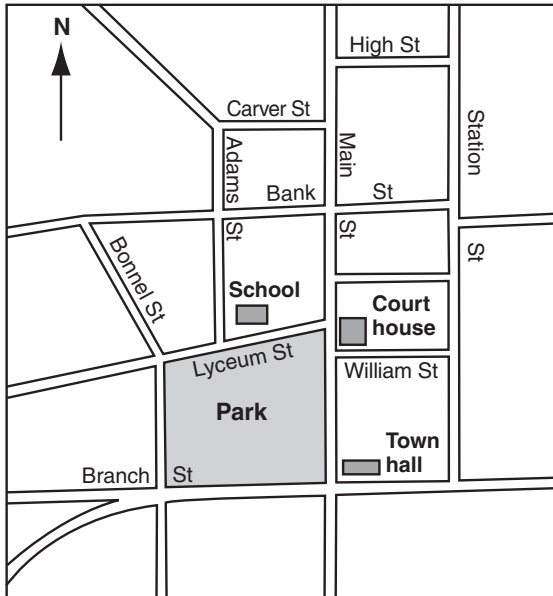
1

# YEAR 7 NUMERACY (NON-CALCULATOR)



22

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



What street does Jill live in?

Adams St

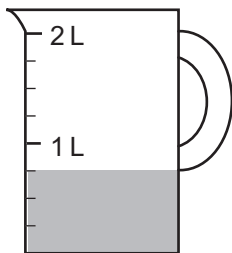
Bonnel St

Station St

Main St

23

This jug has some milk in it.



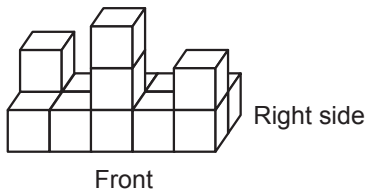
If Eve adds an extra 500 mL of milk to the jug,  
how many millilitres (mL) of milk will then be in the jug?

 mL

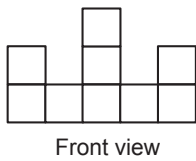


24

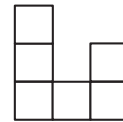
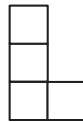
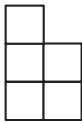
This object was made using identical cubes.



This is a drawing of the view from the front.

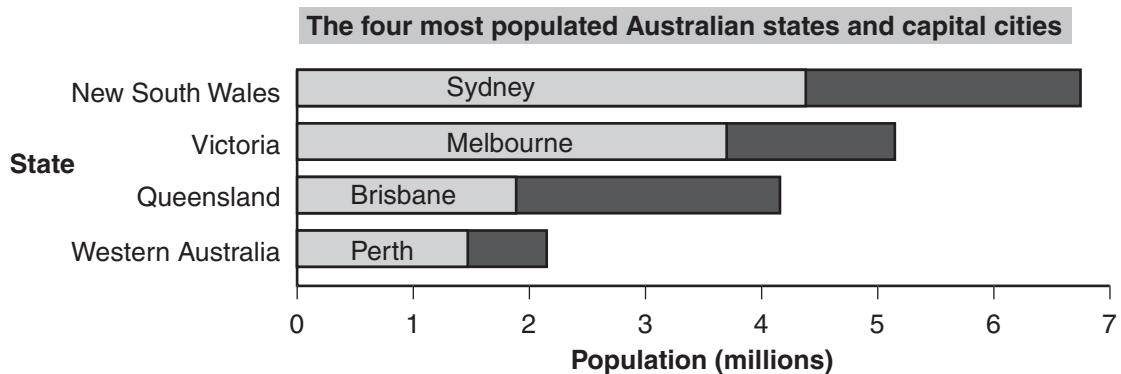


Which drawing shows the view from the right side?



25

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



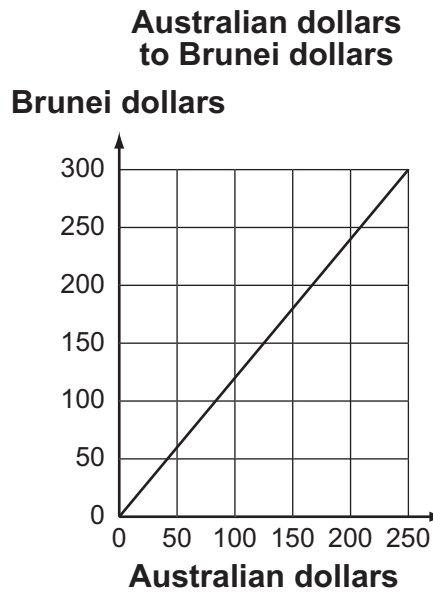
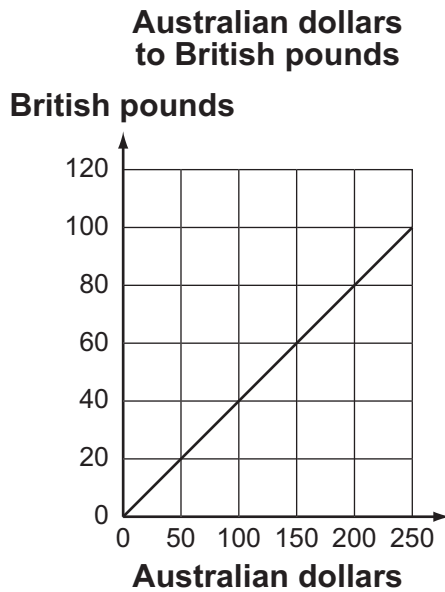
Which of these states has the lowest percentage of its population living in its capital city?

- New South Wales
- Victoria
- Queensland
- Western Australia



26

Alex uses these two conversion graphs.

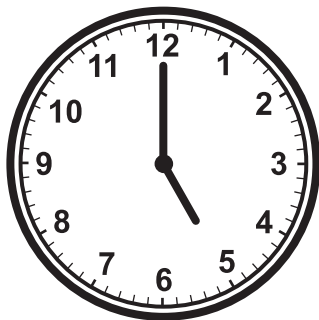


How many Brunei dollars are equal in value to 50 British pounds?

Brunei dollars

27

This clock shows 5 o'clock.



What is the size of the smaller angle between the minute and hour hands?

degrees

28

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

0.022

0.22

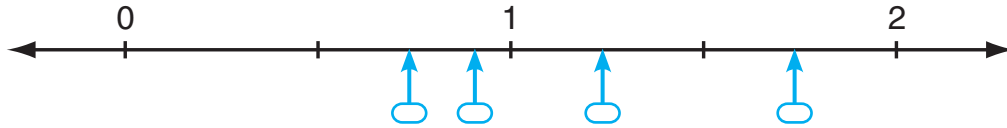
2.2

22



29

Which arrow is pointing closest to the location of  $\frac{3}{4}$  on this number line?



30

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?

grams

31

The dimensions of a large room are double the dimensions of a small room.  
 Both rooms are rectangular prisms. The volume of the small room is 10 cubic metres.


What is the volume of the large room?

- 20 cubic metres
- 40 cubic metres
- 80 cubic metres
- 160 cubic metres



32

This is the label from a can of soup.

| <p style="text-align: center;"><b>Soup Delight</b><br/>                     RICH 'N' RED<br/>                     Tomato</p>  |           |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|
|                                                                                                                                                                                                                | 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                                                                                                                                                                                                   | 6.9 g     | 20.7 g    |
| - SUGARS                                                                                                                                                                                                       | 6.3 g     | 18.9 g    |
| SODIUM                                                                                                                                                                                                         | 345 mg    | 1035 mg   |

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

**STOP – END OF TEST**

## NAPLAN Numeracy Example Test – Year 7 Calculator Allowed

| Question number | Answer key | Question number | Answer key |
|-----------------|------------|-----------------|------------|
| Y7CA Q01        | A          | Y7CA Q17        | C          |
| Y7CA Q02        | D          | Y7CA Q18        | B          |
| Y7CA Q03        | B          | Y7CA Q19        | D          |
| Y7CA Q04        | C          | Y7CA Q20        | B          |
| Y7CA Q05        | B          | Y7CA Q21        | A          |
| Y7CA Q06        | \$5.05     | Y7CA Q22        | B          |
| Y7CA Q07        | D          | Y7CA Q23        | B          |
| Y7CA Q08        | 12         | Y7CA Q24        | 47.5       |
| Y7CA Q09        | C          | Y7CA Q25        | C          |
| Y7CA Q10        | B          | Y7CA Q26        | D          |
| Y7CA Q11        | D          | Y7CA Q27        | 4          |
| Y7CA Q12        | -2.5       | Y7CA Q28        | D          |
| Y7CA Q13        | C          | Y7CA Q29        | D          |
| Y7CA Q14        | 02:36      | Y7CA Q30        | 8.5        |
| Y7CA Q15        | C          | Y7CA Q31        | 388.5      |
| Y7CA Q16        | C          | Y7CA Q32        | 125        |



## NAPLAN Numeracy Example Test – Year 7 Non-Calculator

| Question number | Answer key | Question number | Answer key |
|-----------------|------------|-----------------|------------|
| Y7NC Q01        | D          | Y7NC Q17        | 40         |
| Y7NC Q02        | D          | Y7NC Q18        | 30         |
| Y7NC Q03        | B          | Y7NC Q19        | 402 x 5    |
| Y7NC Q04        | B          | Y7NC Q20        | D          |
| Y7NC Q05        | C          | Y7NC Q21        | D          |
| Y7NC Q06        | D          | Y7NC Q22        | A          |
| Y7NC Q07        | E          | Y7NC Q23        | 1250       |
| Y7NC Q08        | 10         | Y7NC Q24        | A          |
| Y7NC Q09        | 2 or -2    | Y7NC Q25        | C          |
| Y7NC Q10        | B          | Y7NC Q26        | 150        |
| Y7NC Q11        | C          | Y7NC Q27        | 150        |
| Y7NC Q12        | B          | Y7NC Q28        | D          |
| Y7NC Q13        | C          | Y7NC Q29        | A          |
| Y7NC Q14        | C          | Y7NC Q30        | 256        |
| Y7NC Q15        | 128        | Y7NC Q31        | C          |
| Y7NC Q16        | B          | Y7NC Q32        | 300        |