YEAR

7

Example test
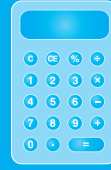
NUMERACY
CALCULATOR ALLOWED

PART A

50min
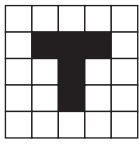
Time available for students to complete Part A: 50 minutes
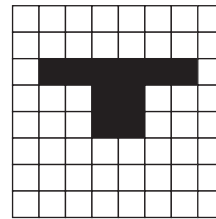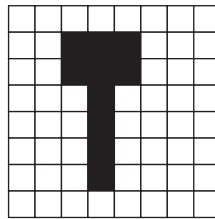
Use 2B or HB pencil **only**

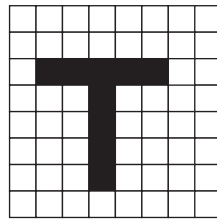**1** Trevor drew this shape on a grid.

He then doubled the height and width of the shape.

Which drawing shows this?

○   ○   ○   ○
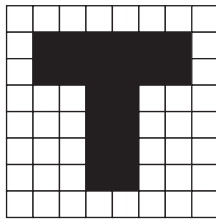
2 For 3 days, Bella made a tally of the birds she saw in a park.
This table shows her results.

Type of bird	Monday	Tuesday	Wednesday
Kookaburra	I I		I
Magpie	I	I I	I
Galah	I I I	I I	
Rosella		I I I I	I I

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

Birds in the park

Number of birds

Type of bird

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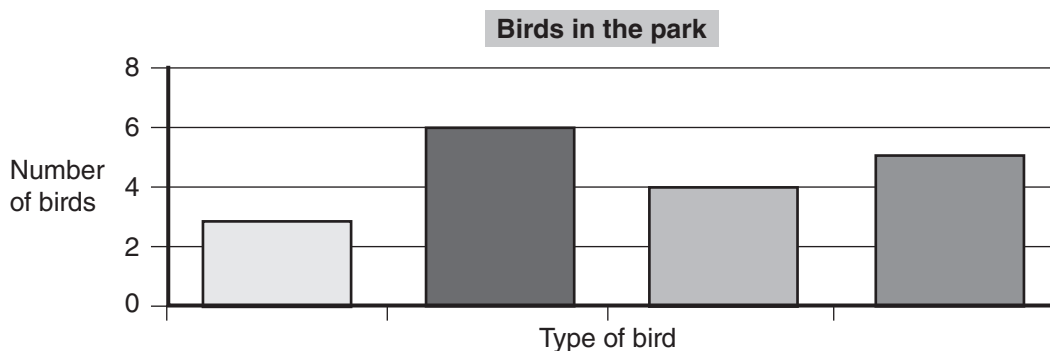
3 In 1894, women were granted the right to vote in South Australia.

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

113 years.	115 years.	125 years.	215 years.
⬭	⬭	⬭	⬭

4 Another way of writing 6^2 is

6×2	6×6	$6 + 6$	$2 \times 2 \times 2 \times 2 \times 2 \times 2$
⬭	⬭	⬭	⬭

5 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
⬭	⬭	⬭	⬭

6 Emma has $1.25 in coins.

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

2	3	4	5
⬭	⬭	⬭	⬭

7

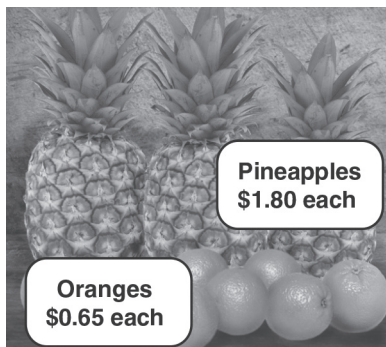Pineapples
$1.80 each

Oranges
$0.65 each

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

How much does Alan pay for the fruit altogether? $ [.   ]
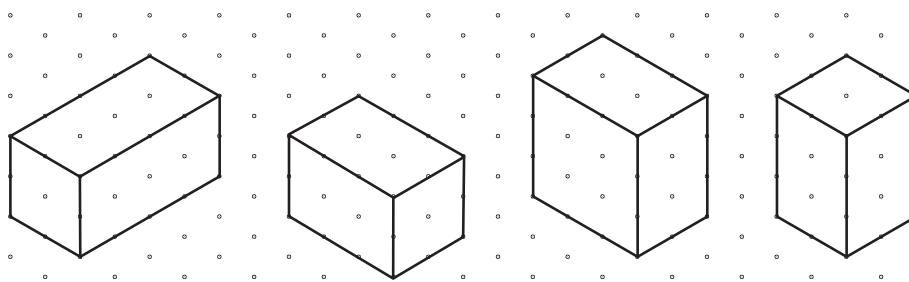
8   3.25, 3.0, 2.75, 2.5, 2.25, ...

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

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

A   **B**   **C**   **D**

Which two drawings are of the same rectangular prism?

A and B   B and C   C and A   B and D

○   ○   ○   ○

10   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.
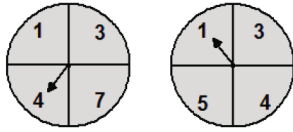
What was Sean's number?

11   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

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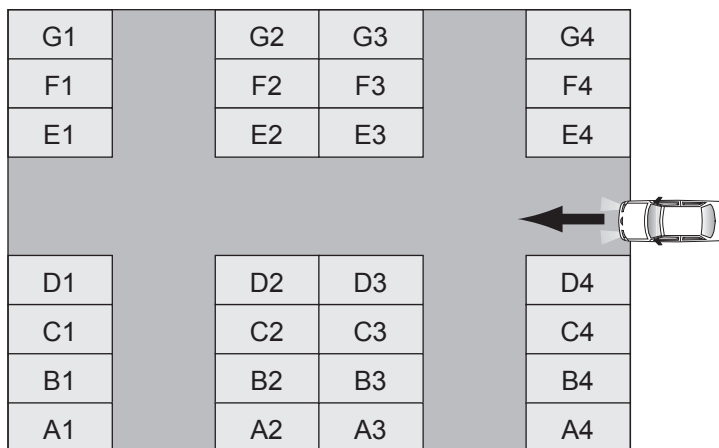

Marie then spins the arrows again.

How many different ways can she get a **total of 8**?

1	2	3	4
⬭	⬭	⬭	⬭

13 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.
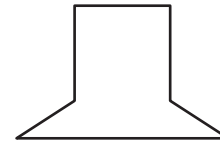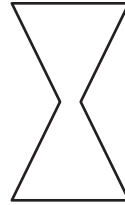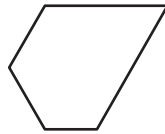
Which parking space is this?

A1	B1	G2	B2
⬭	⬭	⬭	⬭

14 Luke drew a shape with:

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

Which drawing could be Luke's?

○　　　　　○　　　　　○　　　　　○

15

?

```
←——+——+——+——+——+——+——+——+——→
   −4  −3  −2  −1   0   1   2   3
```
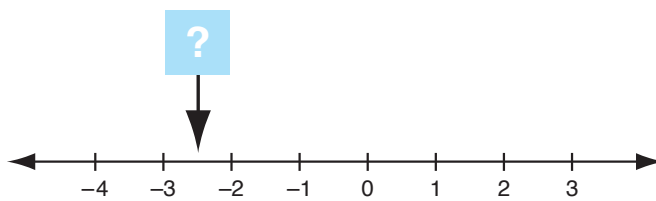
The arrow points to a position on the number line.

What number is at this position?

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

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
cm

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
cm

How much longer is her shoe than her foot?

0.08 cm   0.8 mm   8 mm   8 cm

○　　　　　○　　　　　○　　　　　○

17 The DVD player shows the time of day as 01 : 43.

The movie still has 53 minutes to run.

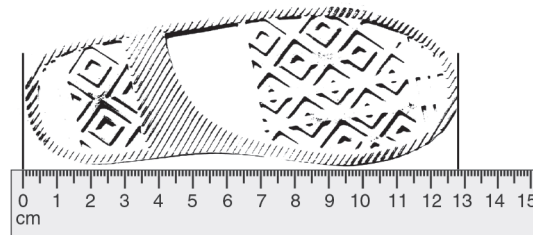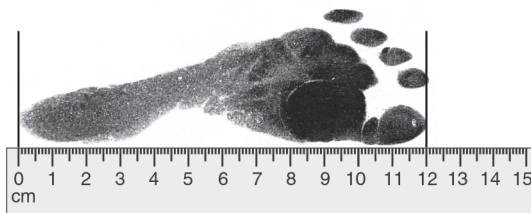What time will the DVD player show at the end of the movie? [:]

---

18 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	62 500
◯	◯	◯	◯

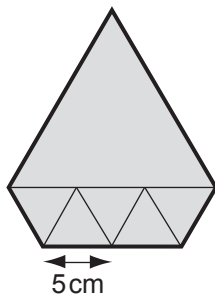
19 This shape is made from five small equilateral triangles
and one large equilateral triangle.

5 cm

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
◯	◯	◯	◯

20 Helen has 24 red apples and 12 green apples.

What fraction of the apples are green?

$\dfrac{1}{2}$　　　　$\dfrac{1}{3}$　　　　$\dfrac{1}{4}$　　　　$\dfrac{1}{12}$

○　　　　　○　　　　　○　　　　　○

21 Last year 3684 people went to a music festival.

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

How many people went to the festival this year?

1228　　　　2442　　　　2456　　　　5526

○　　　　　○　　　　　○　　　　　○

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

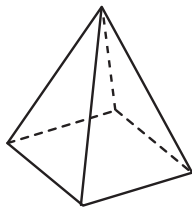|	Monthly bill		
Age	$20 or less	Greater than $20 and less than $30	$30 or more
Under 20	12	28	18
20 – 40	8	14	13
Over 40	15	17	12

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

23 Which object has exactly twice as many edges as faces?
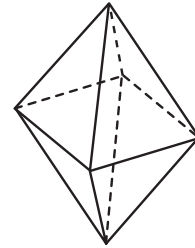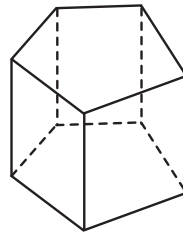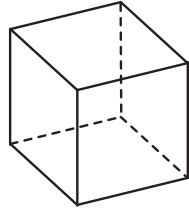
24 Dustin collects football cards.

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

25 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

26 Kim throws a standard 6-sided die.

Which point on the number line best shows the chance of Kim throwing a 2?
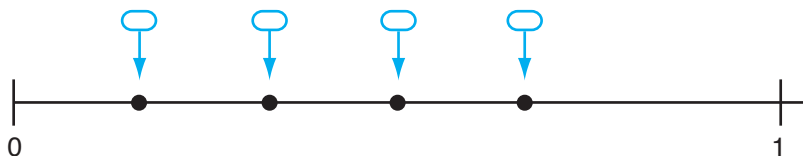
27 Zoe bought a bike on sale at 15% off the original price.
The original price was $420.

How much did Zoe pay for the bike?

$63 $357 $378 $405

○   ○   ○   ○

---

28 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?

○ $a + b + c = 180$

○ $c + d + e + f = 360$

○ $a + b + g = 360$

○ $a + g + f + e = 180$

---

29 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

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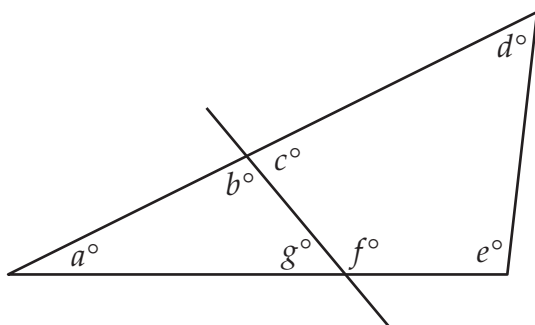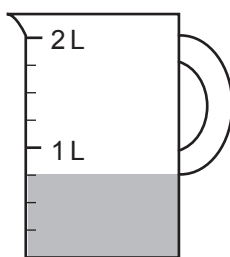She uses 100 litres of water when she has a bath.

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

litres

31 A farm has 4 paddocks.

Which paddock has the largest area?
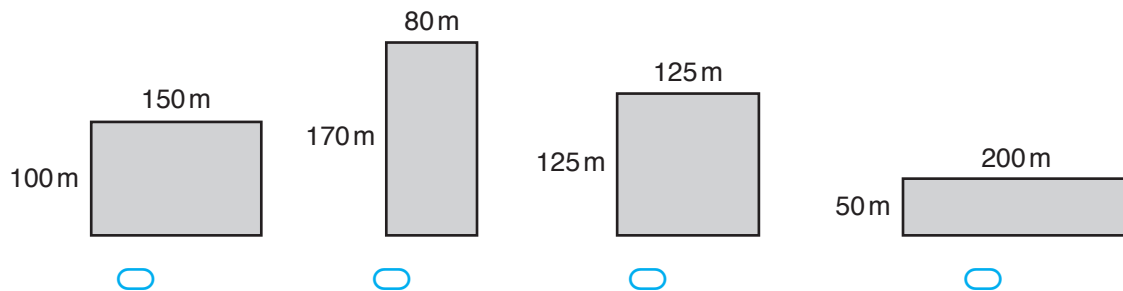
32 An electrician calculates the price of a job using a service fee and an amount per hour.

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

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

Child amount = (Adult amount × Age of child) ÷ (Age of child + 12)

Use this rule to complete the table.

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

34 This clock shows 5 o'clock.
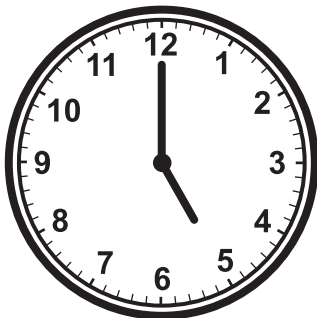
What is the size of the smaller angle between the minute and hour hands?

[   ] degrees

35 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 ⬭

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

711   777   7117   7777

○   ○   ○   ○

---

37 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?

$ [   ]

---

38 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

39 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?

---

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

1. 15° right turn
2. 50° 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 PART A

Do not turn this page.

Do not write on this page.

Do not turn this page.

Do not write on this page.

Do not turn this page.

Do not write on this page.

Do not turn this page.

YEAR

7

Example test

NUMERACY
NON-CALCULATOR

PART B

10min

Time available for students to
complete Part B: 10 minutes

Use 2B or HB
pencil **only**

1 Which one of these has the same value as 12 × 3 ?

10 + 3 + 2	10 × 3 + 2	10 × 3 + 3	10 × 3 + 6
◯	◯	◯	◯

2 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.

3 A computer chip has dimensions 8 mm × 8 mm.
A scale drawing is shown below.

4 cm

4 cm
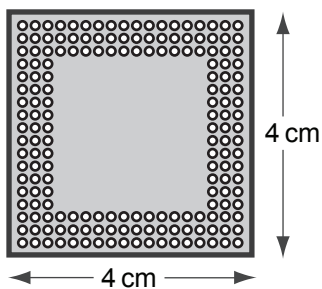
What scale is used in the drawing?

◯ 1 cm represents 5 mm

◯ 1 cm represents 2 mm

◯ 2 cm represents 1 mm

◯ 5 cm represents 1 mm

4 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
◯	◯	◯	◯

5 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
◯	◯	◯	◯

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

4%	10%	25%	40%
◯	◯	◯	◯

7 $37.9 \times 10 =$

3790	3709	37.90	379
◯	◯	◯	◯

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

0.022	0.22	2.2	22
◯	◯	◯	◯

STOP – END OF TEST