YEAR
7
2014

NUMERACY
NON-CALCULATOR

1

Together Luke and Emily saved $150.

Emily saved twice as much money as Luke.

How much money did Luke save?

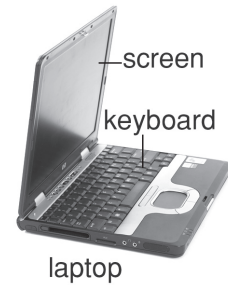| $25	$50	$100	$300
○	○	○	○

2

The screen of a laptop can be opened to different angles.

In which of these is the angle between the screen and the keyboard closest to a right angle?

screen
keyboard
laptop

○

○

○

○

3

Zak has $79.

$145

How much more money does he need to buy the bike?

$64	$66	$74	$76
○	○	○	○

4 Matt and his friends are putting up some tents.

Each tent needs 8 pegs. Each peg can only be used for one tent.

They have 100 pegs.

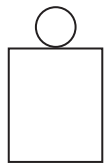What is the maximum number of tents they can put up?

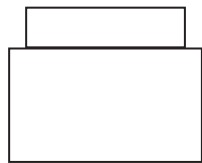| 4	8	12	13
⬭	⬭	⬭	⬭

5 Max put one block on top of another block.
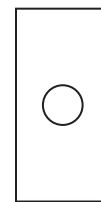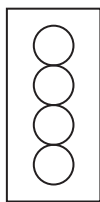
This is a drawing of the front view and the side view.

front view   side view
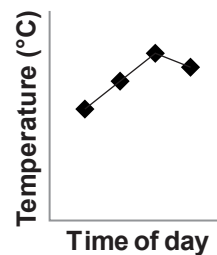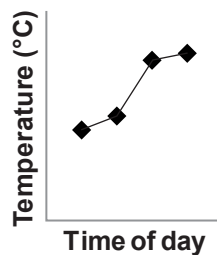
Which of these is a correct top view?
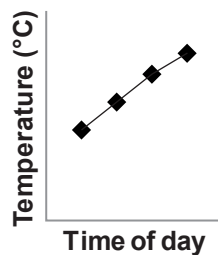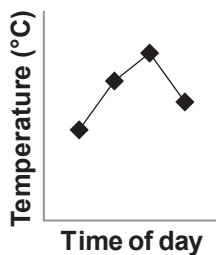
| ⬭ | ⬭ | ⬭ | ⬭ |

6 On Monday Kai measured the temperature every 2 hours from 9:00 am to 3:00 pm.

Time of day	9:00 am	11:00 am	1:00 pm	3:00 pm
Temperature (°C)	13	20	24	17

Which graph shows Kai's results?

| ⬭ | ⬭ | ⬭ | ⬭ |

7 Which of these patterns fits the rule, "Double the previous number and add 3"?

- ◯ 2, 3, 4, 6, 8, …
- ◯ 2, 7, 12, 17, 22, …
- ◯ 3, 6, 12, 24, 48, …
- ◯ 3, 9, 21, 45, 93, …

8 Ted uses sticks to make a pattern.

He starts with 2 sticks for Stage 1.

Stage 1	Stage 2	Stage 3	Stage 4
2 sticks	6 sticks	12 sticks	20 sticks

How many sticks does Ted need for Stage 6?
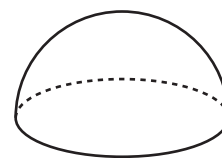
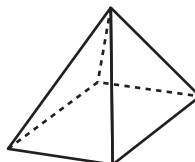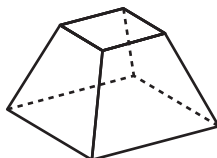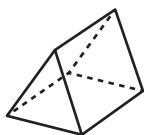| 24	26	30	42
◯	◯	◯	◯

9 Grace poured half a litre of milk into a jug.

How many millilitres did she pour into the jug?

- ◯ 50
- ◯ 250
- ◯ 500
- ◯ 2000
- ◯ 5000

10 Which object is a prism?

◯   ◯   ◯   ◯

11 Sandra can run 5 kilometres in 30 minutes.

Running at the same speed, how long will it take Sandra to run 4 kilometres?

18 minutes	20 minutes	24 minutes	29 minutes
⬭	⬭	⬭	⬭

12 Which rectangle has one-third shaded grey?

⬭	⬭	⬭	⬭
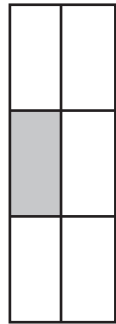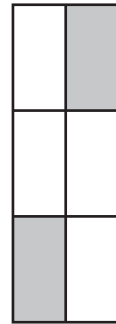
13 There were 22 people at a party.

The cost was $24 per person, plus $40 extra for the cake.

Which of these shows how to calculate the total cost of the party in dollars?

(40 + 24) × 22	(22 × 24) + 40	22 + 24 + 40	22 × 24
⬭	⬭	⬭	⬭

14 This cylinder can hold up to 50 mL of water.

How much water is in the cylinder?

10 mL	20 mL	30 mL	40 mL
⬭	⬭	⬭	⬭

15 The Year 7 classes at a school collected cans for recycling.

The table shows the mass each class collected.

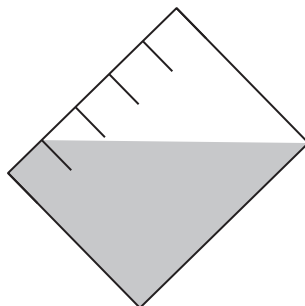|	Class 7P	Class 7K	Class 7T	Class 7H
Week 1	5.29 kg	5.32 kg	5.3 kg	4.88 kg
Week 2	4.56 kg	4.01 kg	4.99 kg	5.25 kg

Which class collected the greatest total mass?

Class 7P   Class 7K   Class 7T   Class 7H

○   ○   ○   ○

16 This table shows how many balloons of each colour are in the clown's bag.

Balloon colour	Number of balloons
red	16
pink	8
blue	3
yellow	5

Without looking, the clown takes a balloon out of his bag.

What is the chance that the balloon is red?

$\dfrac{1}{32}$ $\dfrac{1}{16}$ $\dfrac{1}{4}$ $\dfrac{1}{2}$

○   ○   ○   ○

17 Which of these values of ? makes this number sentence true?

$3 \times$? > 21

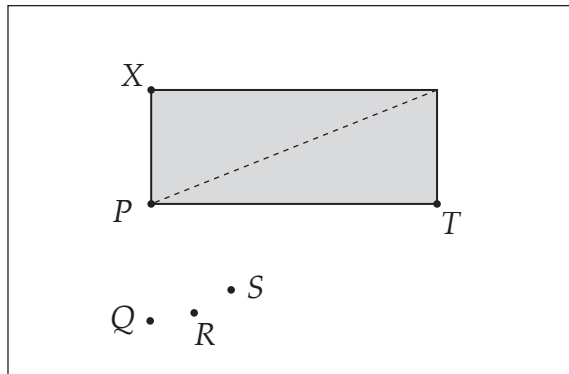5   6   7   8

○   ○   ○   ○

18 The shaded rectangle will be folded along the dotted line.
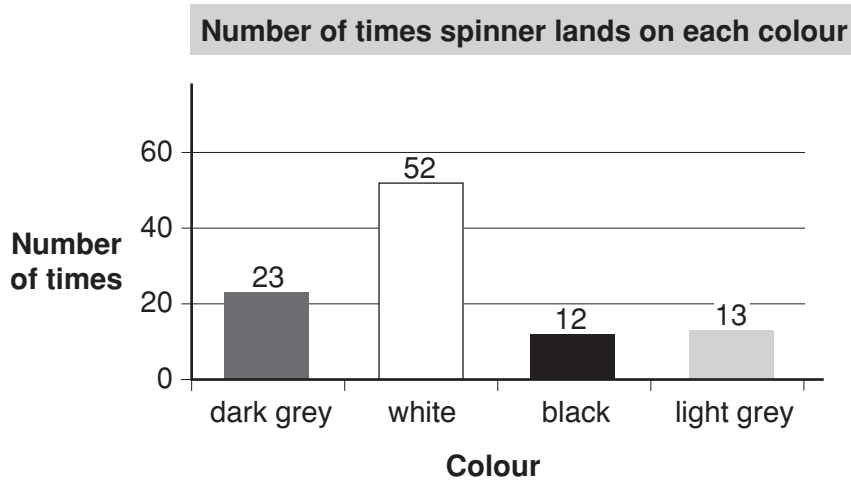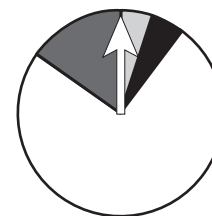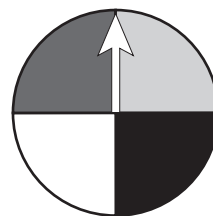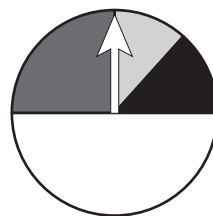

Where will point X move to?

P Q R S T
◯ ◯ ◯ ◯ ◯

19 This graph shows the results of 100 spins of a spinner.

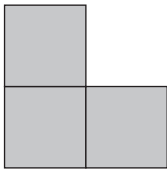**Number of times spinner lands on each colour**

Which of these spinners is most likely to give the results shown in the graph?
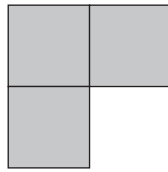

◯ ◯ ◯ ◯
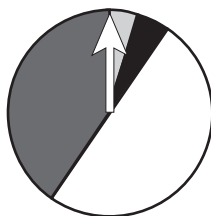
20

Shape 1   Shape 2

Shape 1 is rotated to look like Shape 2.

Which of these could describe the rotation?

45° clockwise   45° anticlockwise   90° clockwise   90° anticlockwise

◯   ◯   ◯   ◯

21

Harry used 400 grams of flour to make 24 cupcakes.

How many grams of flour will Harry need to make 36 cupcakes?

[   ] grams

22

Daisy Street   Lily Street   Rose Street

Iris Street

Tulip Street   Violet Street

N
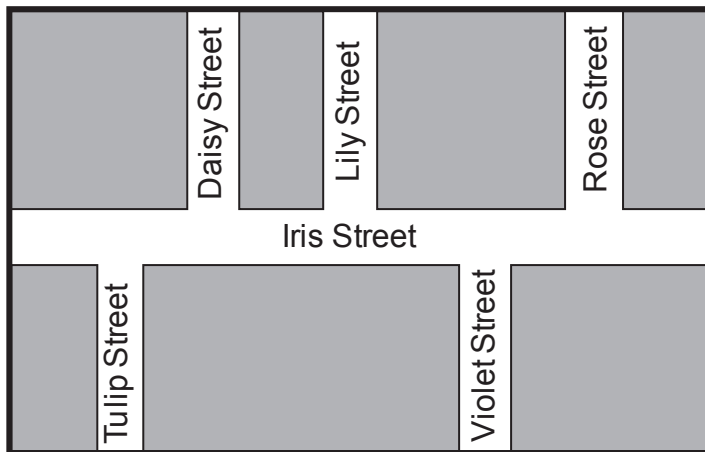
Levi walked south along Lily Street and then turned right on to Iris Street.

What was the first street he passed on his left?

Tulip Street   Daisy Street   Violet Street   Rose Street

◯   ◯   ◯   ◯

23

Anna's family spends $120 a week on groceries.

How much does her family spend in 52 weeks?

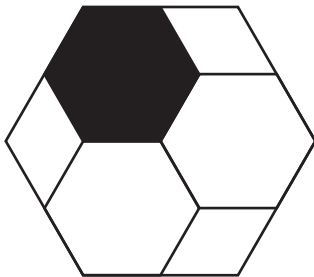$ [   ]

24

This shape is made with three regular hexagons and three rhombuses.

What fraction of the shape is black?

$\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$

◯   ◯   ◯   ◯

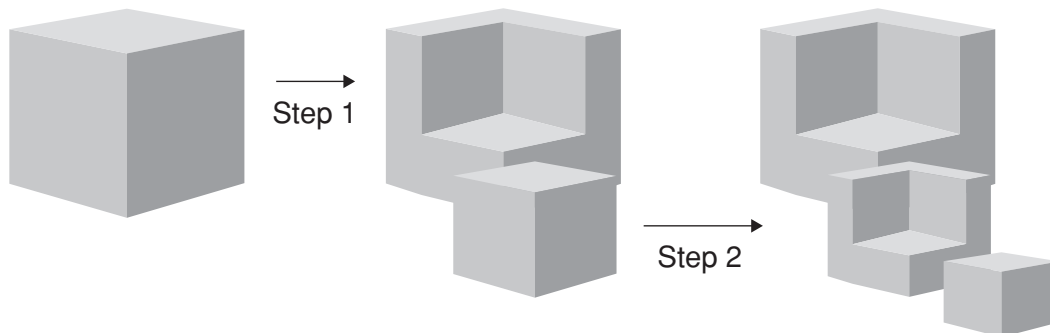**25**

This drawing shows how a 3-piece sculpture is made from a large cube.

Step 1: A medium cube is cut from a large cube.

Step 2: A small cube is cut from the medium cube.

Step 1

Step 2

What is the total number of faces of the three pieces after Step 2, including the bases?
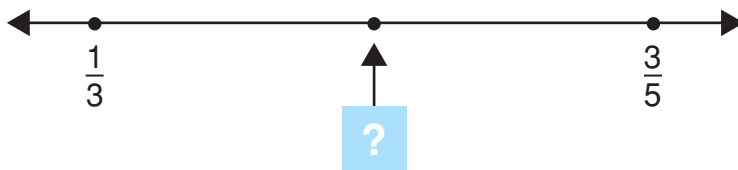
[   ] faces

26 James places one box on top of another box.

The total height of the two boxes is 19 centimetres.

One box is 5 centimetres taller than the other.

What is the height of the taller box?

| | centimetres

27

Which fraction is halfway between $\frac{1}{3}$ and $\frac{3}{5}$ on the number line?

$\frac{1}{4}$ $\frac{2}{4}$ $\frac{2}{15}$ $\frac{7}{15}$ $\frac{14}{15}$

◯ ◯ ◯ ◯ ◯

28 Which of these is closest to the value of the missing number in this equation?

$(\boxed{?} + 59.65) \div 3.14 = 78.5$

60 85 140 180 300

◯ ◯ ◯ ◯ ◯

29 The length of this rectangle is double its height.

The perimeter of the rectangle is 24 centimetres.

What is the area of the rectangle?

| | square centimetres

30 Five students measured a 20-metre path by taking large steps.

This table shows how many steps each student took.

Student	Number of steps
Paul	16
Bella	20
Toby	25
Emily	28
Heidi	40

Which student took steps that were about 80 centimetres long?

Paul	Bella	Toby	Emily	Heidi
⬭	⬭	⬭	⬭	⬭

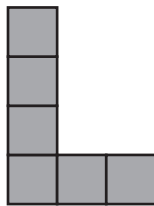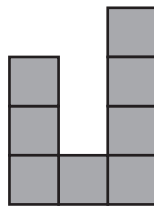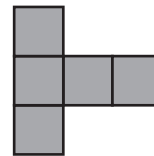**31** The pictures show the front, side and top views of an object made of cubes.

front view   left side view   top view

How many cubes are needed to make the object?

32 The fraction $\frac{1}{8}$ equals 0.125 as a decimal.

What does $\frac{1}{16}$ equal as a decimal?

STOP – END OF TEST