

# NUMERACY NON-CALCULATOR



YEAR  
**7**  
2015

## SESSION 2

**40 min**

Time available for students to  
complete test: 40 minutes

Use 2B or HB  
pencil **only**

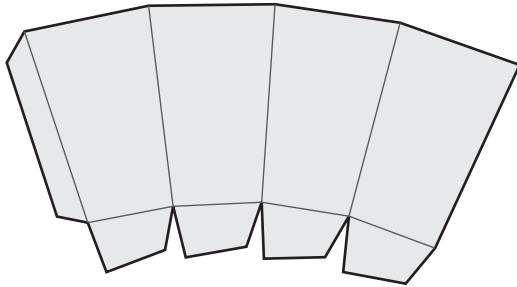


# YEAR 7 NUMERACY (NON-CALCULATOR)

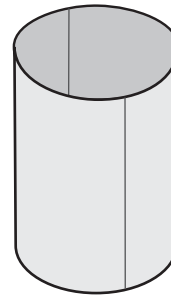
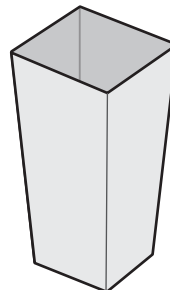
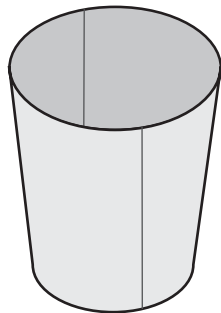
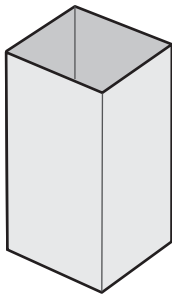


1

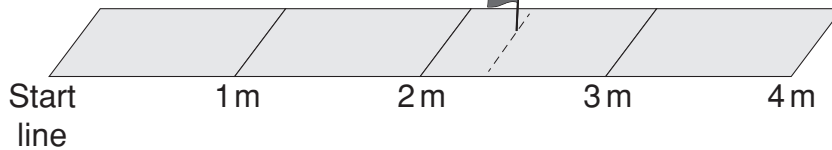
This shape is cut out of cardboard and glued to make a container.



Which container would it make?



2



Mike jumped from the start line and landed where the flag is.

Which of these is closest to the length of his jump?

$\frac{2}{3}$  m

$2\frac{1}{3}$  m

$2\frac{1}{2}$  m

$3\frac{2}{3}$  m

# YEAR 7 NUMERACY (NON-CALCULATOR)



3  $3 \times ? = 57$

What number does ? represent?

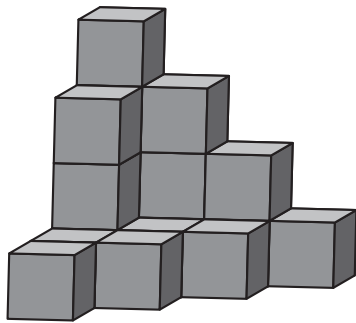
19

29

54

171

4 This is a view of a solid made by stacking 18 identical cubes.



How many cubes are completely hidden in this view?

13

12

7

6

5 Bella had \$10. She bought 5 sketchbooks from a shop.  
Each sketchbook costs \$1.10.

How much change should she get?

\$4.50

\$5

\$5.50

\$8.90

6 This table shows a pattern. The top and bottom numbers are connected by a rule.

<b>Top number</b>	1	2	3	4	.....	?
<b>Bottom number</b>	3	6	9	12	.....	27

What is the top number when the bottom number is 27?

5

9

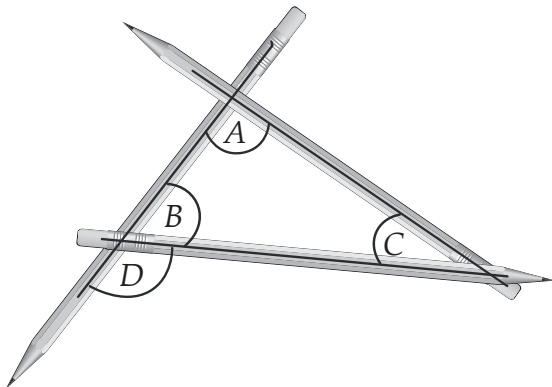
15

19



7

Which of these angles is closest in size to a right angle?



A

B

C

D

8

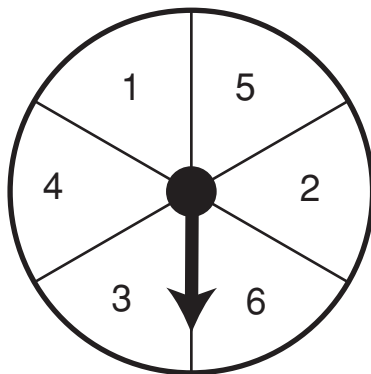
There were 4000 people at a football match.  
Three-quarters of them were under cover.

How many people were **not** under cover?

9

This spinner is spun twice.

The two numbers that the arrow lands on are added.



Which of these totals is most likely to occur?

7

10

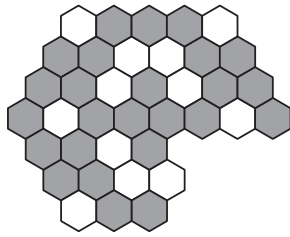
11

12



10

Some tiles are missing from this pattern of tiles.



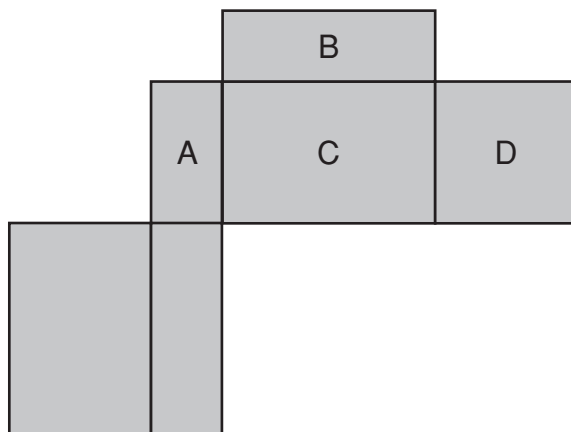
When complete the pattern has two lines of symmetry.

Which of these could be the missing part of the pattern?



11

Brad was trying to draw a net of a rectangular prism.



He drew one face of the prism incorrectly.

Which face did he draw incorrectly?

A

B

C

D

12

Allen's house was built in 1936.

Approximately how many years old is Allen's house?

60

70

80

90



13

Some students were given the choice of four movies to watch.

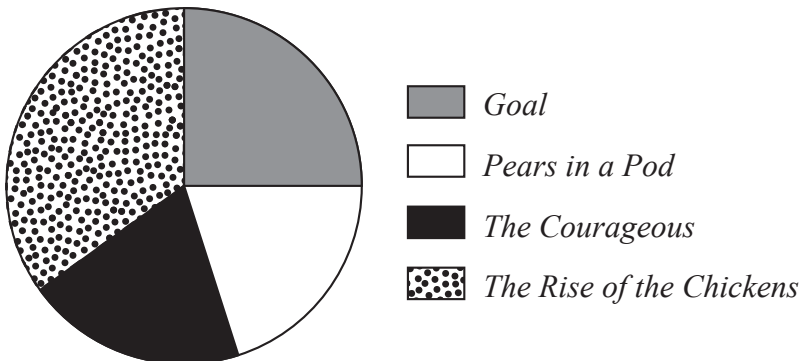
They each voted for one movie.

5 students voted for *Goal*.

4 students voted for *Pears in a Pod*.

4 students voted for *The Courageous*.

The rest voted for *The Rise of the Chickens*.



How many students voted for *The Rise of the Chickens*?

7

8

9

10

14

James wants to buy a jacket marked at \$180.

He is given a discount of 10%.

What is the value of the discount?

\$1.80

\$10

\$18

\$170

15

$$\text{😊} = 6$$

$$\text{😊} \times \text{★} = \text{★} + \text{★} + \text{★} + \text{😊}$$

What is the value of ★ ?

0

1

2

3

4

## YEAR 7 NUMERACY (NON-CALCULATOR)



16

Sienna is using a 250-millilitre cup to fill a 3-litre container.

Which one of these expressions shows how many full cups she will need?

$3 \times 250$

$3000 \div 250$

$3000 \times 250$

$250 \div 3$

17

Mary is facing north-west. She makes a quarter turn to her left.

Which direction is she facing after the turn?

west

north

north-east

south-west

18

This table shows the prices of different kinds of fruit in a market.

<b>Fruit</b>	apricots	grapes	bananas	apples
<b>Price</b>	90 cents for 250 grams	\$3.00 for 750 grams	\$3.80 for 1 kilogram	\$1.70 for 500 grams

Which of these is the most expensive fruit per kilogram?

apricots

grapes

bananas

apples

19

Joe's toy car is 5 cm long.

His dad's car is 4 m long.

How many times as long as Joe's toy car is his dad's car?

1

20

80

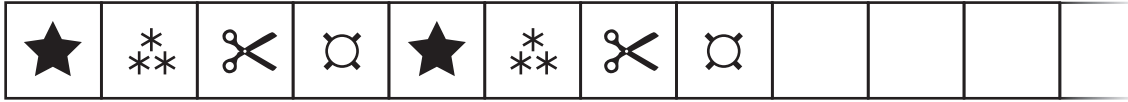
125

200



20

Jane is repeating 4 symbols along a border as shown.  
Altogether there are 38 squares to fill along the border.



Which symbol will Jane put in the 38th square?



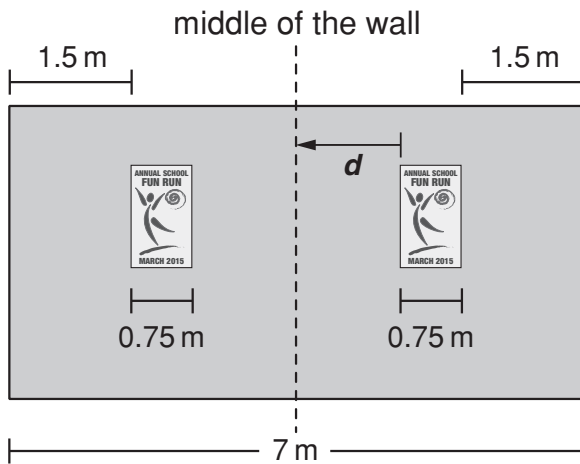







21

Sanjeet put two identical posters on his wall as shown.



What is the distance  $d$  from the edge of each poster to the middle of the wall?

1.25 m

1.5 m

2.25 m

2 m

4.75 m

22

Stuart made a phone call that lasted 59 minutes.

The cost per minute for the phone call was \$0.89.

Stuart estimated that the total cost of the phone call was about \$54.

Stuart's estimate was

- less than the actual cost.
- equal to the actual cost.
- more than the actual cost.



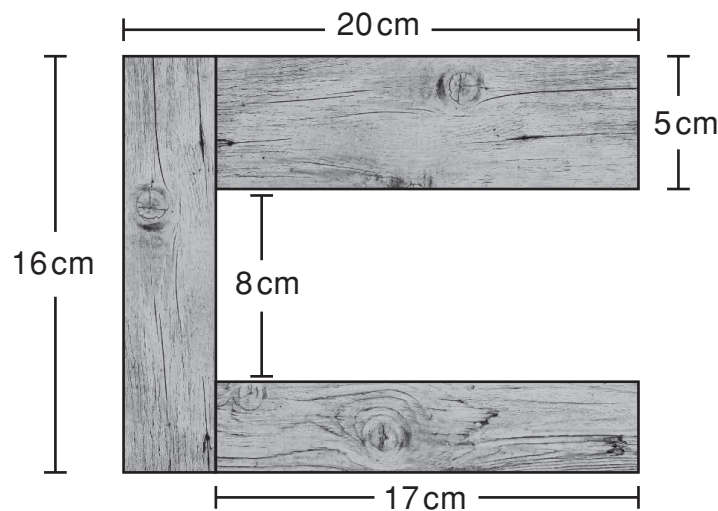


23

Sasha shared 20 muesli bars with three friends.  
 She gave Hannah two bars fewer than Noah.  
 She gave Kyle three bars more than Hannah.  
 Sasha ended up having twice as many bars as Hannah.  
 How many muesli bars did Sasha have in the end?

24

Carla made a letter 'C' out of 3 rectangular wooden pieces as shown.



What is the perimeter of this wooden letter in centimetres?

- 66                      72                      86                      103                      106
- 

25

Graeme spent \$45 at a post office.  
 He bought a special set of stamps for \$16.  
 With the remaining money he bought 10 stamps at \$1.50 each  
 and some stamps at 70 cents each.  
 How many 70-cent stamps did Graeme buy?



26

A standard six-sided dice is rolled once.

What is the probability that the number on the top face is a factor of 6?

$$\frac{1}{6}$$

$$\frac{1}{3}$$

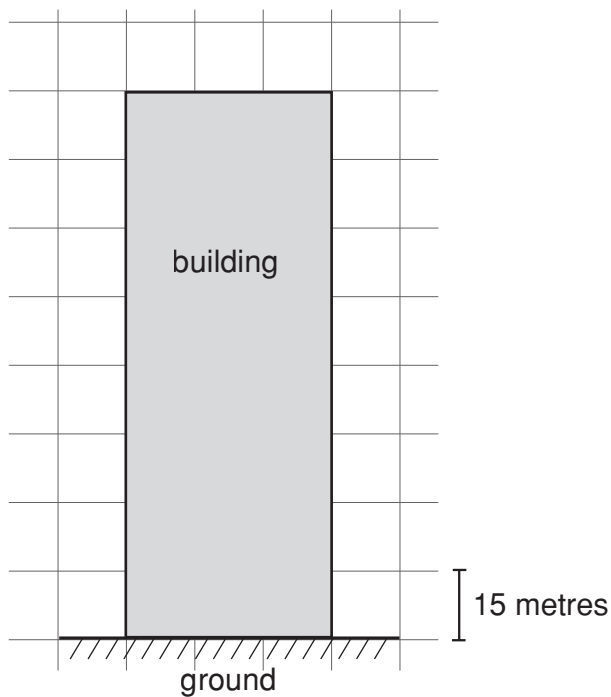
$$\frac{1}{2}$$

$$\frac{2}{3}$$

27

Zoe was making a scale drawing of a 40-storey building on grid paper.

The height of each storey of the building was the same.



What was the height of each storey of this building?

metres

28

Which two odd numbers, greater than 1, have a product of 143?

and



29

Ann arrived at Wickham Station at 11:00 and caught the next train to Pemberley Station.

Station	Train A	Train B	Train C	Train D
Bennet	10:53	11:07	11:12	—
Wickham	10:59	11:13	—	11:31
Bingley	11:14	—	11:33	11:46
Rosling	11:19	11:30	—	11:51
Pemberley	11:29	—	11:48	12:01

At what time did she arrive at Pemberley Station?

11:29

11:30

11:48

12:01

30

Which of these is **not** equal to  $36 \times 20$ ?

$36 \times 10 \times 2$

$360 \times 2$

$30 \times 20 + 6 \times 20$

$30 + 6 \times 20$

31

Ali had a solid prism with eight faces.

Ali cut the prism in half to make two smaller identical prisms.

What is the least number of faces that one of the smaller prisms could have?

32

Wesley has three times more coloured pencils than lead pencils and five times more coloured pencils than pens.

He has 12 more lead pencils than pens.

How many pens does Wesley have?

**STOP – END OF TEST**