# NUMERACY NON-CALCULATOR 



## YEAR 7 NUMERACY (NON-CALCULATOR)

1 Which one of these has the same value as $12 \times 3$ ?
$10+3+2$
$10 \times 3+2$
$10 \times 3+3$
$10 \times 3+6$

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 (( 7 ( 6$\div 7=$


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 be25.78 seconds.

- 25.91 seconds.
- 26.31 seconds.
- 26.92 seconds.

4 Another way of writing $6^{2}$ is
$6 \times 2$
$6 \times 6$
$6+6$
$2 \times 2 \times 2 \times 2 \times 2 \times 2$

## YEAR 7 NUMERACY (NON-CALCULATOR)

$5 \quad$ 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 $3 \quad$ 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 0.5increase by 0.25decrease by 0.5decrease by 0.25

7
Hannah folds this net to make a cube.


Which face is opposite face $C$ ? $\square$

## 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?
$\square$

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

What is the number? $\square$

10 A computer chip has dimensions $8 \mathrm{~mm} \times 8 \mathrm{~mm}$.
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
$\bigcirc$
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## YEAR 7 NUMERACY (NON-CALCULATOR)

12 Lucy made 4 tree designs using sticks.
There is a pattern in the way the trees grow.

Tree 1 Tree 2 1 stick 3 sticks



Tree 3 7 sticks


Tree 4 15 sticks

Lucy continues the pattern in the same way.
How many sticks will Tree 5 have?


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?


14
What is $\$ 10$ as a percentage of $\$ 40$ ?


## YEAR 7 NUMERACY (NON-CALCULATOR)

15


What is the size of the angle in the shaded triangle marked by the arrow?
$\square$ degrees

Helen has 24 red apples and 12 green apples.
What fraction of the apples are green?
$\frac{1}{2}$
0
$\frac{1}{3}$
$\frac{1}{4}$
$\frac{1}{12}$


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

## Monthly bill

| Age | $\mathbf{\$ 2 0}$ or less | Greater than $\mathbf{\$ 2 0}$ <br> and less than $\mathbf{\$ 3 0}$ | $\mathbf{\$ 3 0}$ 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 $\$ 30$ ?
$\square$

## YEAR 7 NUMERACY (NON-CALCULATOR)

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


How many faces are painted? $\square$

19 These are four number cards.


Use each card once to make this number sentence true.

$37.9 \times 10=$
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?
$\square$ mL

24 This object was made using identical cubes.


Front
This is a drawing of the view from the front.


Front view
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.

The four most populated Australian states and capital cities


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


New South WalesVictoriaQueenslandWestern Australia

## YEAR 7 NUMERACY (NON-CALCULATOR)

26 Alex uses these two conversion graphs.

Australian dollars to British pounds
British pounds


Australian dollars
to Brunei dollars

## Brunei dollars



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

27
This clock shows 5 o'clock.


What is the size of the smaller angle between the minute and hour hands? $\square$ degrees

What is the answer to $6.6 \div 0.3$ ?
0.022
0.22
2.2
22$\bigcirc$
$\bigcirc$

## YEAR 7 NUMERACY (NON-CALCULATOR)

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?
$\square$ grams

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 metres40 cubic metres80 cubic metres
$\bigcirc$
160 cubic metres

32 This is the label from a can of soup.


What is the mass of one serve of this soup? $\square$ grams

## STOP - END OF TEST

