## Excel Test Zone

## 1APMAR*-sti/G <br> SAMPLE TEST

## YEAR

## NUMERACY <br> Calculator Allowed



FIRST NAME $\qquad$

LAST NAME $\qquad$

## CLASS

$\qquad$

## SESSION 1


Time available for students to complete the Numeracy Test: 40 minutes

## YEAR 7 NUMERACY

1 What percentage of this figure is coloured?


$$
15 \%
$$

$20 \%$
$25 \%$
$30 \%$
$\bigcirc$


2 Here is a sum that is made up of shapes. Each shape is a number. Only one of the numbers is given.
$\Delta=7$
$\square-\Delta=\Delta \times \Delta$

Which number does the $\square$ equal?
49
56
65
63
$\bigcirc$
$\bigcirc$
$\bigcirc$
$\bigcirc$

3 Many patients recovering from surgery died of infections before British surgeon Joseph Lister used antiseptics in 1865.

He was born in 1827 and died in 1912. How old was he when he died?


Source: Art Today
83
85
87
89
$\bigcirc$
$\bigcirc$
$\bigcirc$
$\bigcirc$

## YEAR 7 NUMERACY

4 The distance between Sydney and Los Angeles in California is about 12000 km . About how long would an A380 travelling at 900 km per hour take to fly from Sydney to California?

○ 13.0 hours
O 13.1 hours


O 13.3 hours
○ 13.5 hours

5 On this indicator, how far is it from Maroubra to the City?

9.6 km
10.8 km
4.8 km
9.0 km

$\bigcirc$

6 The toner for a printer costs $\$ 65.50$.


If you pay for the toner with a $\$ 100$ bill, how much change would you receive?
$\$ 33.50$
\$35.50
$\bigcirc$
$\$ 35.00$
$\bigcirc$
\$34.50
$\bigcirc$

7 A boy cut a rope that was 14.5 m long into 2.9 m lengths. How many lengths did he cut?
mannemsononononononononanal
4
$\bigcirc$
5
$\bigcirc$

6
$\bigcirc$

8 Here are five numbers.


Which two numbers should be subtracted one from the other to give an answer that can be rounded up to 75 ?

## $9 \quad 35-7 \times 3=\square$

10 This is a chart that shows how much water a household used a day.


By how much has their water use changed in this bill from the same time last year?

| 13 litres | 266 litres | 253 litres | 366 litres |
| :---: | :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

11 Find the area of this figure.
O $49 \mathrm{~cm}^{2}$
○ $36.6 \mathrm{~cm}^{2}$
○ $98 \mathrm{~cm}^{2}$


○ $196 \mathrm{~cm}^{2}$

12 Complete this number sentence.

$$
46.6+208.4=\square+30.3
$$

Write your answer in the box.

13 What is the size of angle PQR ?

$60^{\circ}$ $90^{\circ}$
$54^{\circ}$
$84^{\circ}$


14 The path from the corner of Holmes Street and Anzac Parade to Edgar Street is shown by the dotted line. Follow the arrow.

In what direction is someone travelling from the beginning at Anzac Parade to the finish at Edgar Street?
$\bigcirc$ south
$\bigcirc$ south-east
$\bigcirc$ east


○ west

15 Some tiles will be used to make a pattern. Each tile is 0.2 m diagonally. The distance to be tiled is 3.6 m .


How do we work out how many white tiles will be needed to fill the pattern?
$3.6 \div 2$
$3.6 \times 2$
$\bigcirc$
$3.6 \div 0.2$
$\bigcirc$
$3.6 \times 0.2$
$\bigcirc$

## YEAR 7 NUMERACY

16 Which of the letters below is pointing to -0.4 ?

A
B
C
D
$\bigcirc$
$\bigcirc$
$\bigcirc$
$\bigcirc$

17 This is a rectangular prism. What is the volume of this figure?

$39 \mathrm{~cm}^{3}$
$1000 \mathrm{~cm}^{3}$

$100 \mathrm{~cm}^{3}$

$250 \mathrm{~cm}^{3}$
$\bigcirc$

18 This map shows the three different time zones in Australia. The time is different in each of these three areas.

If it is $4: 00 \mathrm{pm}$ in Perth (Western Standard Time), what would be the time in Adelaide (Central Standard Time)? (Hint: find Eastern Standard Time first.)

- 2:00 pm

5:30 pm
( $6: 00 \mathrm{pm}$
O $2: 30 \mathrm{pm}$


## YEAR 7 NUMERACY

19 Here is a shape. It contains squares. Some of the squares are all white, some are all grey and some are half grey and half white.

Fill in circle.


What proportion of the squares is half grey and half white?

| $\frac{6}{8}$ | $\frac{16}{6}$ | $\frac{3}{8}$ | $\frac{10}{16}$ |
| :---: | :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

20 The price of a game after a $25 \%$ discount was $\$ 207$. What was the price before the discount?
\$277
\$286
\$267
\$276
○
$\bigcirc$
$\bigcirc$
○

21 How many four-digit numbers can you make using the numerals $1,2,3$ and 4 ? Each numeral can only be used once in each number.
20
24
16
36
$\bigcirc$
$\bigcirc$
$\bigcirc$
$\bigcirc$

22 There are three soccer fields at my school. There is a 10 metre distance between each field. The perimeter of the three fields is 730 metres.


If the length of each soccer field at my school is 100 metres, what is its width?

40 metres
0

45 metres
$\bigcirc$

50 metres
$\bigcirc$

55 metres
$\bigcirc$

## YEAR 7 NUMERACY

23 Here is a series of numbers.
(23)



What would be the next number?
40
41
42
43
$\bigcirc$
$\bigcirc$
$\bigcirc$
$\bigcirc$

24 You toss three 50 cent coins at once. What are the chances of throwing two tails and one head (in any order)?


1 in 8
1 in 4
1 in 6


3 in 8
$\bigcirc$

$\bigcirc$
$\bigcirc$

25 In order to relieve famine in a country, 80000 tonnes of food were sent. If $15 \%$ of the food was spoilt and then $10 \%$ of what was left was damaged, how much food was left for famine relief?
61200 tonnes
62100 tonnes
68000 tonnes
60120 tonnes

$\bigcirc$

26 Here is a credit account for a household. The amount for accommodation is not shown.

| SIVA EXPRESS CARD |  |
| :--- | :---: |
| MONTHLY Account |  |
| Hardware | $\$ 29.50$ |
| Books | $\$ 50.00$ |
| Air travel | $\$ 211.00$ |
| Accommodation | $?$ |
| Total amount due | $\$ 534.67$ |

How much is the accommodation cost?


## YEAR 7 NUMERACY

27 If $\frac{3}{4}$ of half a number is 960 , what is the number? 2880

1280
1920




28 A coach wants to set a rope around the edge of an oval. He uses around 332.84 metres of rope.


The manager of the team now says it should be 1 metre wider all round the field.
About how much more rope will be needed? (Hint: use pi or $\pi=3.14$.)
$\bigcirc$ about 6.28 metres
$\bigcirc$ about 60.28 metres
$\bigcirc$ about 20.28 metres
$\bigcirc$ about 16.28 metres
$29 ?(?+9=45$
What number goes in the symbol? with the question mark?

| -4 | -5 | -6 | -7 |
| :---: | :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

30 What is the volume of this cylinder?

$660 \mathrm{~cm}^{3}$


$735 \mathrm{~cm}^{3}$
$\bigcirc$
$2310 \mathrm{~cm}^{3}$
$\bigcirc$

## YEAR 7 NUMERACY

31 What is the total number of degrees in the interior angles of a any pentagon?

$180^{\circ}$
$360^{\circ}$
$540^{\circ}$
$720^{\circ}$

32 Imagine a box with an ant at one corner. The ant wants to travel to the opposite corner by the most direct path. It must travel across the top of the box at some stage. The top of the box is the light area. It cannot travel along the ground or under the box. (Hint: it does not have to travel along an edge.)


What is the shortest possible path?
7.8 cm
6.5 cm
4.9 cm
3.8 cm$\bigcirc$
$\bigcirc$ $\bigcirc$

## END OF TEST

## Year 7 NAPLAN*-style Sample Test NUMERACY ANSWERS

## Calculator Allowed

1. $20 \%$
2. 56
3. 85
4. 13.3 hours
5. 9.6 km
6. $\$ 34.50$
7. 5
8. $103-29$
9. 14
10. 266 litres
11. $49 \mathrm{~cm}^{2}$
12. 224.7
13. $84^{\circ}$
14. south-east
15. $3.6 \div 0.2$
16. C
17. $1000 \mathrm{~cm}^{3}$
18. $5: 30 \mathrm{pm}$
19. $\frac{3}{8}$
20. $\$ 276$
21. 24
22. 45 metres
23. 42
24. 3 in 8
25. 61200 tonnes
26. \$244.17
27. 2560
28. about 6.28 metres
29. -6
30. $2310 \mathrm{~cm}^{3}$
31. $540^{\circ}$
32. 7.8 cm
[^0]
[^0]:    * This is not an officially endorsed publication of the NAPLAN program and is produced by Pascal Press independently of Australian governments.

