## NATIONAL ASSESSMENT PROGRAM LITERACY AND NUMERACY

# NUMERACY CALCULATOR-ALLOWED 

## YEAR



# SAMPLE QUESTIONS 

These sample questions illustrate some of the question types and formats which will appear in the 2008 NAPLAN.

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1 A triangle has an area of $108 \mathrm{~cm}^{2}$ and a height of 12 cm .
The length of its base is
4.5 cm
$\bigcirc$
9 cm
$\bigcirc$
18 cm
$\bigcirc$
36 cm
$\bigcirc$

2 This cylindrical glass has a height of 12 cm and a base radius of 4 cm .
The straw is 19 cm long.


The length of straw sticking out the top of the glass is closest to
0.3 cm
$\bigcirc$
3.0 cm
$\bigcirc$
5.0 cm
$\bigcirc$
6.3 cm
$\bigcirc$

3


This block of cheese will be cut into 2 cm cubes.
It is 14 cm long, 8 cm wide and 4 cm high.
The mass of the cheese is 630 g .
What will be the mass of each cube?
$\square$

1 One case of oranges cost $\$ 28.00$ at the market.
Each case contains 96 oranges with an average weight of 230 g each.
In a fruit shop the oranges are sold at a profit of $70 \%$.
The shop selling price per kilogram for the oranges is closest to
\$1.27
\$1.63
\$1.96
\$2.16$\bigcirc$
$\bigcirc$
$\bigcirc$
$\bigcirc$
Shade one bubble.
\$2.21

In a for sher


Here is the graph of a linear equation. If the line is extended indefinitely at both ends which one of these points will lie on it?
$(-7,-5)$
$\bigcirc$
$(-5,-14)$
$(6,17)$
$(8,3)$

$\bigcirc$

3 The cooking time for a roast chicken is 20 minutes plus 30 minutes per kilogram. If $M$ is the mass of the roast in kilograms, the total cooking time in minutes is
$50 \times M$
$30 \times M \div 50$
$20 \times M \div 30$
$20+30 M$
$\bigcirc$
$\bigcirc$

1 A pair of jeans priced at $\$ 79.95$ is marked down by one third at a sale. What is the marked-down price of the jeans?

Shade one bubble.
$\$ 22.62$ $\bigcirc$
$\$ 53.30$
$\$ 55.96$ O
$\$ 79.65$

2 Solve this equation for $z$.

$\frac{2 z+5}{7}=-13$
$z=\square$

4 A tradesman quotes $\$ 780.00$ to resurface a rectangular driveway 15 m long and 4 m wide.
But when he arrives and measures the driveway, he finds it is 14 m long and 5 m wide.
What should he adjust his quote to?
(Assume he applies the same cost per square metre as originally.)

$\$ 790.00$
$\$ 793.00$
$\bigcirc$
$\$ 850.00$
$\bigcirc$
$\$ 910.00$
$\bigcirc$

1 If $x=5$, which of these expressions is equal to 225?
$22 x$
$3 x^{2}$
$\bigcirc$
$\bigcirc$
$9 x^{2}$
$\bigcirc$
$x^{3}$
$\bigcirc$

2 The square root of 250 is
$\bigcirc$ between 10 and 15 .
$\bigcirc$
between 15 and 20 .
$\bigcirc$
between 40 and 60 .
$\bigcirc$
between 100 and 150 .

3 Over the first nine games of a netball season, Carla has thrown an average (mean) of 16 goals per game. In her tenth game she throws 26 goals.

Her average after ten games is

- 17 goals per game.
- 18 goals per game.
- 20 goals per game.
- 21 goals per game.

4


The value of $z$ in this diagram is
25
$\bigcirc$
31
0
34
56
$\bigcirc$

1 What is the missing number?

$9 \times 48=12 \times$ $\square$

2 What is the total area of the six faces of this rectangular prism?

$\mathrm{cm}^{2}$

3 Bill takes one ball from one of the four buckets shown without looking.
Which bucket will Bill have a 1 in 5 chance of drawing out a black ball?


3 Which diagram shows a rhombus?

$\bigcirc$

$\bigcirc$

$\bigcirc$

1 Li ran at a speed of 7 metres per second for 6 seconds.
How many metres did she run?
Write your answer in the box.


2 Which of the following is the largest number?

$1 \frac{1}{4}$
$\frac{7}{5}$
1.3
$\frac{10}{7}$

$\bigcirc$
$\bigcirc$
$\bigcirc$

3 The table below shows how far 4 students can run in 10 seconds.


| Student | Pat | Jess | Nick | Peta |
| :---: | :---: | :---: | :---: | :---: |
| Distance <br> (metres) | 80 | 70 | 75 | 60 |

What is the average (mean) distance the 4 students can run in 10 seconds?
$\square$ metres

