

NATIONAL ASSESSMENT PROGRAM LITERACY AND NUMERACY

NUMERACY

CALCULATOR-ALLOWED

YEAR

9

SAMPLE QUESTIONS

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

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- The Australian Capital Territory Department of Education and Training;
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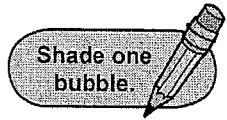
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SAMPLE MATERIAL ONLY

1 A triangle has an area of 108 cm^2 and a height of 12 cm.

The length of its base is



4.5 cm

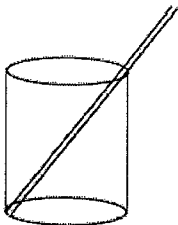
9 cm

18 cm

36 cm

2 This cylindrical glass has a height of 12 cm and a base radius of 4 cm.

The straw is 19 cm long.



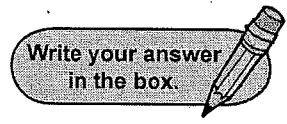
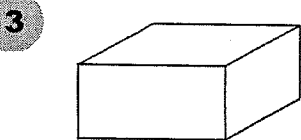
The length of straw sticking out the top of the glass is closest to

0.3 cm

3.0 cm

5.0 cm

6.3 cm



This block of cheese will be cut into 2 cm cubes.

It is 14 cm long, 8 cm wide and 4 cm high.

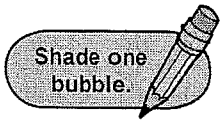
The mass of the cheese is 630 g.

What will be the mass of each cube?

	g
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Not all items in this test require the use of a calculator

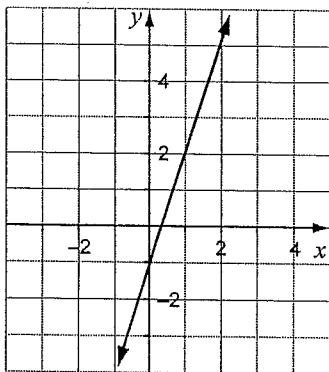
- 1 One case of oranges cost \$28.00 at the market.
Each case contains 96 oranges with an average weight of 230 g each.
In a fruit shop the oranges are sold at a profit of 70%.



The shop selling price per kilogram for the oranges is closest to

- \$1.27 \$1.63 \$1.96 \$2.16 \$2.21
-

2



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?

- $(-7, -5)$ $(-5, -14)$ $(6, 17)$ $(8, 3)$
-

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

- $50 \times M$ $30 \times M + 50$ $20 \times M + 30$ $20 + 30M$
-

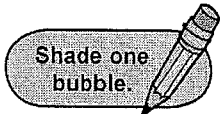
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Not all items in this test require the use of a calculator

SAMPLE MATERIAL ONLY

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?

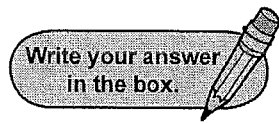


- \$22.62
- \$53.30
- \$55.96
- \$79.65

2 Solve this equation for z.

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

z =



3 Jane, Meg and Oliver scored 1400 points altogether on a computer game.

Jane has 50 more points than Meg and Meg has 4 times as many points as Oliver.

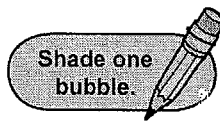
How many points does Oliver have?

points

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
- \$850.00
- \$910.00

Not all items in this test require the use of a calculator

SAMPLE MATERIAL ONLY

1 If $x = 5$, which of these expressions is equal to 225?

$22x$

$3x^2$

$9x^2$

x^3

2 The square root of 250 is

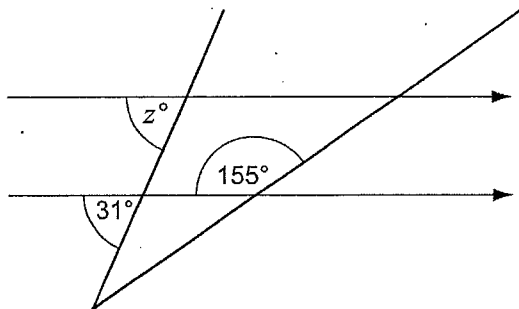
- between 10 and 15.
- between 15 and 20.
- between 40 and 60.
- between 100 and 150.

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

31

34

56

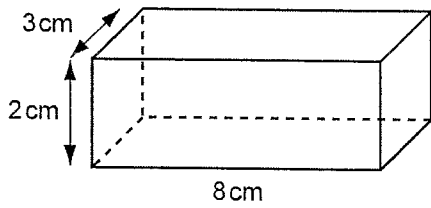
Not all items in this test require the use of a calculator

1 What is the missing number?

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

Write your answer in the box.

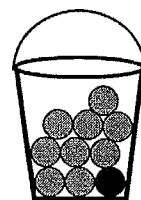
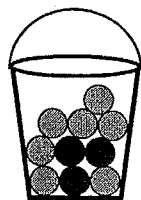
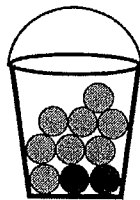
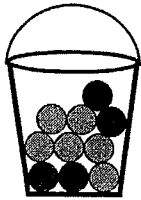
2 What is the total area of the six faces of this rectangular prism?



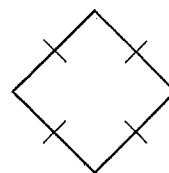
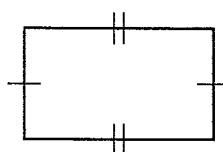
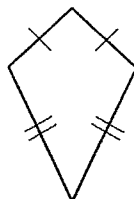
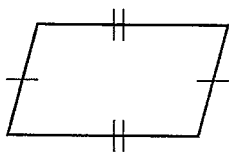
cm²

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?

Shade one bubble.



3 Which diagram shows a rhombus?



Not all items in this test require the use of a calculator

SAMPLE MATERIAL ONLY

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.

metres

2 Which of the following is the largest number?

$1\frac{1}{4}$

$\frac{7}{5}$

1.3

$\frac{10}{7}$



Shade one bubble.

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

Write your answer in the box.

Student	Pat	Jess	Nick	Peta
Distance (metres)	80	70	75	60

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

metres

Not all items in this test require the use of a calculator

SAMPLE MATERIAL ONLY