



MINISTERIAL COUNCIL ON EDUCATION,
EMPLOYMENT, TRAINING AND YOUTH AFFAIRS

NATIONAL ASSESSMENT PROGRAM
LITERACY AND NUMERACY

NUMERACY

CALCULATOR ALLOWED



YEAR

7

2009



0:40

SESSION 1

Time available for students
to complete test: 40 minutes

Use 2B or HB
pencil only



© Curriculum Corporation, on behalf of the Ministerial Council on Education, Employment, Training and Youth Affairs, 2009.

**This page is
meant to be blank.**

YEAR 7 NUMERACY

PRACTICE QUESTIONS

P1 50, 100, 150, 200, 250, ?

Shade one bubble.



Which number comes next in this sequence?

251

☐

260

☐

300

☐

350

☐

P2 Jim gets paid \$10 per hour.
He worked for 5 hours.

Write your answer in the box.



How much did Jim earn?

\$

P3 \$1 = 100 cents

Complete the table.

\$	cents
1	100
2	200
5	

P4 Write a fraction equivalent to **one half**.

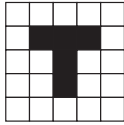
Write your answer in the boxes.



CALCULATOR ALLOWED

YEAR 7 NUMERACY

- 1** Trevor drew this shape on a grid.

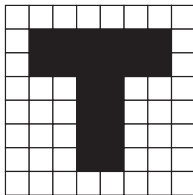


Shade one bubble.

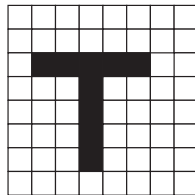


He then doubled the height and width of the shape.

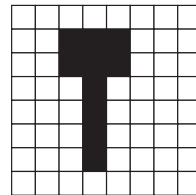
Which drawing shows this?



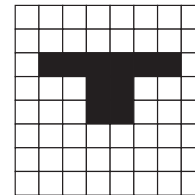
☐



☐

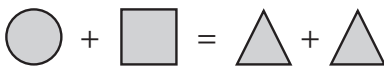
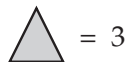
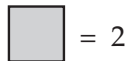


☐



☐

2



Which number does  equal?

2

☐

3

☐

4

☐

6

☐

3

In 1894, women were granted the right to vote in South Australia.

By 2009, women in South Australia will have been able to vote for

113 years.

☐

115 years.

☐

125 years.

☐

215 years.

☐

CALCULATOR ALLOWED

YEAR 7 NUMERACY

- 4** Edward travelled 110 kilometres in 2 hours.

What was his average speed in kilometres per hour?

50

☐

55

☐

70

☐

220

☐

Shade one bubble.



- 5** Two places are 4.7 cm apart on a map.
On the map 1 cm represents 5 km.

What is the actual distance between the two places?

1.06 km

☐

9.4 km

☐

23.5 km

☐

47 km

☐

- 6** The area of Australia is 7 686 850 square kilometres.

What is this area rounded to the nearest thousand square kilometres?

7 000 000

☐

7 600 000

☐

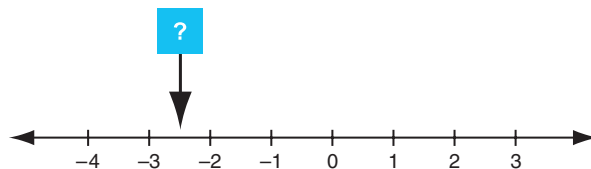
7 686 000

☐

7 687 000

☐

7



The arrow points to a position on the number line.

What number is at this position?

Write your answer in the box.



- 8** Sean wrote a number on a piece of paper.
If he multiplied his number by 5 and then divided by 2,
the answer would be 30.

What was Sean's number?

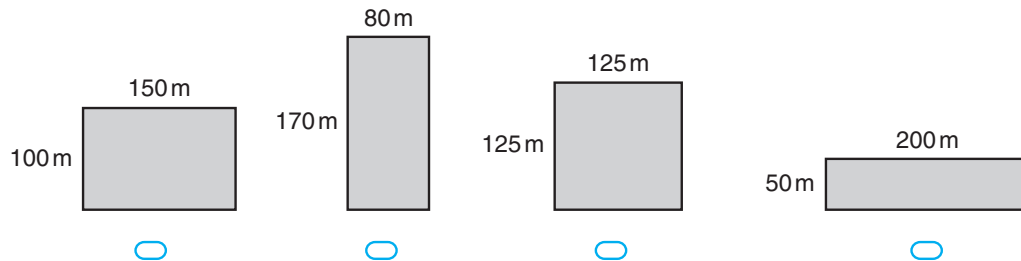
CALCULATOR ALLOWED

YEAR 7 NUMERACY

- 9 A farm has 4 paddocks.

Which paddock has the largest area?

Shade one bubble.



- 10 A water tank has a capacity of 6.25 kilolitres.

How many **litres** does the water tank hold when it is full?

625 6025 6250 62 500

☐ ☐ ☐ ☐

- 11 Four families flew to Australia.

The airline allows each person to have 22 kg of luggage.

Family name	Number of people	Mass of family luggage
Nguyen		61 kg
Boyd		87 kg
Clarke		111 kg
Agostini		131 kg

Which family had more than 22 kg of luggage per person?

Nguyen Boyd Clarke Agostini

☐ ☐ ☐ ☐

CALCULATOR ALLOWED

YEAR 7 NUMERACY

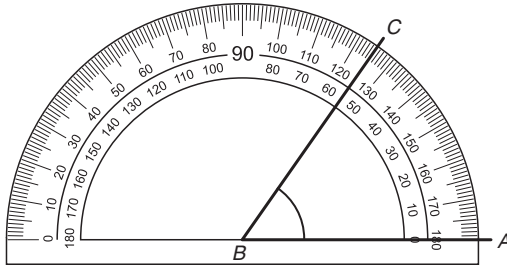
- 12** What number will make this number sentence true?

$$4.52 + 3.68 = \boxed{} + 3.70$$

Write your answer
in the box.



- 13**



What is the size of angle ABC ? °

- 14**



Shade one
bubble.



Tara is travelling along Bellwood Avenue towards Dominion Road.

What direction is Tara travelling?

North-East

☐

North-West

☐

South-East

☐

South-West

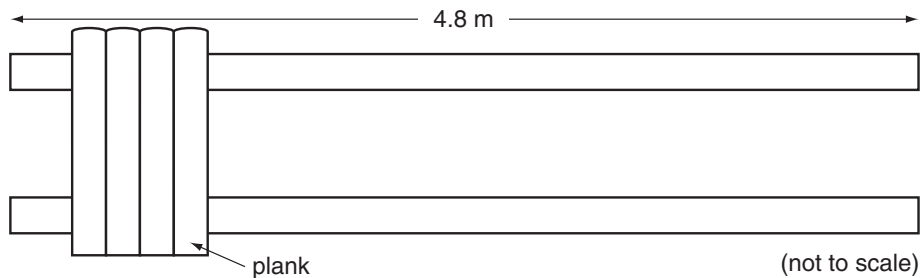
☐

CALCULATOR ALLOWED

YEAR 7 NUMERACY

- 15** Sam is building a wooden fence that is 4.8 metres long. He is using planks that are all 0.12 metres wide. There are no gaps between the planks.

Shade one bubble.



How should Sam calculate how many planks he will need altogether?

- ☐ $4.8 \div 0.12$
- ☐ $0.12 \div 4.8$
- ☐ 4.8×0.12
- ☐ $4.8 - 0.12$

- 16** $45 \times \blacklozenge = 18$

What is the value of $\blacklozenge$?

$$\frac{2}{5}$$

☐

$$\frac{3}{5}$$

☐

$$\frac{5}{2}$$

☐

$$\frac{5}{3}$$

☐

- 17** Alex bought 3 pieces of fish and a \$2 bag of chips. The cost was \$11.90.

What would 2 pieces of fish and a \$1 bag of chips cost?

\$9.90

☐

\$8.90

☐

\$8.60

☐

\$7.60

☐

CALCULATOR ALLOWED

YEAR 7 NUMERACY

- 18** Zoe bought a bike on sale at 15% off the original price.
The original price was \$420.

Shade one bubble.



How much did Zoe pay for the bike?

\$63

☐

\$357

☐

\$378

☐

\$405

☐

- 19** A vase has 18 flowers in it.
12 flowers are blue.

What fraction of the flowers are blue?

$\frac{18}{12}$

☐

$\frac{6}{12}$

☐

$\frac{3}{4}$

☐

$\frac{2}{3}$

☐

- 20** Harry sets his watch and his alarm clock to different times.

8:10

Watch



Alarm clock

When his alarm clock shows



what time does his watch show?

11:50

☐

10:50

☐

12:20

☐

11:55

☐

CALCULATOR ALLOWED

YEAR 7 NUMERACY

CALCULATOR ALLOWED

- 21** The DVD player shows the time of day as 01:43.
The movie still has 53 minutes to run.

Write your answer
in the box.



What time will the DVD player show at the end of the movie?

:

- 22** This calculation gives the average speed (kilometres per hour) of a rocket over a small time interval.

$$\frac{62.735 - 6.855}{0.04}$$

What is the average speed of the rocket?

kilometres per hour



- 23** The diameter of a \$2 coin is about 2 cm.

Shade one
bubble.



About how much would a 1 km line of \$2 coins be worth?

\$1000

☐

\$5000

☐

\$20 000

☐

\$100 000

☐

YEAR 7 NUMERACY

- 24** This hexagon pattern is made with sticks.

Shade one bubble.



Hexagons					
Number of hexagons	1	2	3	4	10
Number of sticks	6	11	16	21	?

How many sticks are needed to make 10 of these hexagons?

- 51 53 55 60
- ☐ ☐ ☐ ☐

- 25** The mean (average) of five numbers is 34.
One more number is added and the mean becomes 35.
The number added is

- 34 35 40 69
- ☐ ☐ ☐ ☐

- 26** Emma used identical cubes to build a rectangular prism.
There were 12 cubes in its base.
She used 60 cubes altogether.
Which of these could be the dimensions of Emma's prism?

- $10 \times 1 \times 6$ $2 \times 6 \times 10$ $4 \times 3 \times 5$ $3 \times 4 \times 6$
- ☐ ☐ ☐ ☐

- 27** A rule to calculate the amount of medicine (mL) a child needs is:

$$\text{Child amount} = (\text{Adult amount} \times \text{Age of child}) \div (\text{Age of child} + 12)$$

Use this rule to complete the table.

Write your answer in the box.



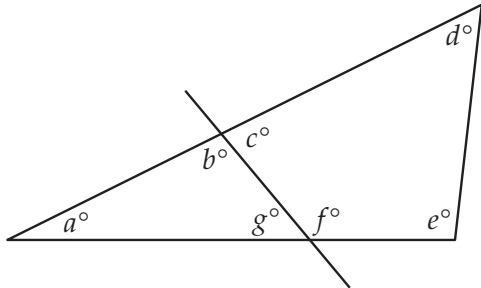
Adult amount (mL)	Age of child (years)	Child amount (mL)
10	8	

CALCULATOR ALLOWED

YEAR 7 NUMERACY

- 28** A triangle is divided into 2 parts by a straight line.
The angles are then labelled.

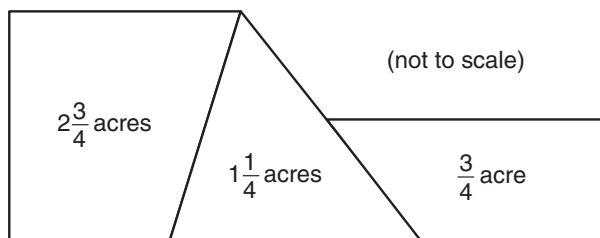
Shade one bubble.



Which statement is true about the sum of angles?

- ☐ $a + b + c = 180$
- ☐ $c + d + e + f = 360$
- ☐ $a + b + g = 360$
- ☐ $a + g + f + e = 180$

- 29** This plan shows 3 blocks of land.
Their areas are measured in **acres**.



1 hectare = 2.47 acres

The total area of the 3 blocks in **hectares** is closest to

- ☐ 1.82
- ☐ 1.92
- ☐ 4.75
- ☐ 11.73

CALCULATOR ALLOWED

YEAR 7 NUMERACY

- 30** This pyramid has a square base.



Write your answer
in the box.



The area of the square base is $52\,900\text{ m}^2$.

What is the length (m) of **one side** of the base? m

- 31** Carlos has 3 times as many orange trees as lemon trees.
Altogether he has 76 trees.

How many **orange** trees does he have?

- 32** Sue draws a polygon.
It has a certain number of 120° angles
and the same number of 150° angles.
It has no other angles.

Shade one
bubble.



The polygon is

a pentagon.

☐

a hexagon.

☐

an octagon.

☐

a decagon.

☐

END OF TEST

CALCULATOR ALLOWED