NATIONAL ASSESSMENT PROGRAM
LITERACY AND NUMERACY

NUMERACY
CALCULATOR ALLOWED

YEAR 7 2009

128_129 7N

1052913 1

FIRST NAME: _____

LAST NAME: _____

Date of Birth: _____ / _____ / _____   GENDER: _____

SOUTH SYDNEY HIGH SCHOOL

530_8545

5308545 4

7404444

STUDENT TO COMPLETE

Please print your first name and last name below. Write in capital letters.

FIRST NAME _____   LAST NAME _____

TEACHER TO COMPLETE

Please indicate if any of the following apply for this test session. The student was

◯ absent   ◯ exempt   ◯ withdrawn   ◯ sanctioned abandonment

Books for students in these categories MUST NOT be returned for processing.

Please indicate if student received special provisions to complete this test session.

The student accessed the following special provisions:

◯ Large Print   ◯ Braille   ◯ Assistive technology   ◯ Oral sign support

◯ Adjustable furniture   ◯ Separate supervision   ◯ Extra time   ◯ Scribe

◯ Other (specify) _____   ◯ Reader

The student is enrolled in a Support Class: ◯ yes

SESSION 1 Time available for students to complete test 40 minutes   **Use 2B pencil only**

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.   *Write your answer in the box.*
He worked for 5 hours.

How much did Jim earn?

$ [   ]

P3 $1 = 100 cents

Complete the table.

$	cents
1	100
2	200
5	

P4   Write one half as a fraction.   *Write your answer in the boxes.*

[   ]
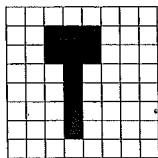[   ]

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Trevor drew this shape on a grid.
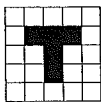
He then doubled the height and width of the shape.

Which drawing shows this?

Shade one bubble.

○   ○   ○   ○
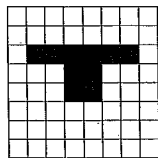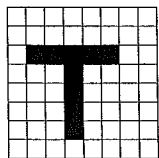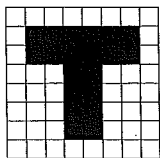
 = 2
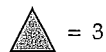
 = 3

○ + ▨ = △ + △

Which number does ● equal?

2   3   4   6

○   ○   ○   ○

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.

○   ○   ○   ○

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4   Edward travelled 110 kilometres in 2 hours.

What was his average speed in kilometres per hour?

Shade one bubble.

50   55   70   220

○   ○   ○   ○

---

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

○   ○   ○   ○

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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
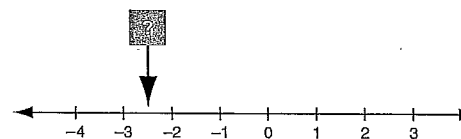
○   ○   ○   ○

7

Write your answer in the box.

The arrow points to a position on the number line.

What number is at this position?   _____

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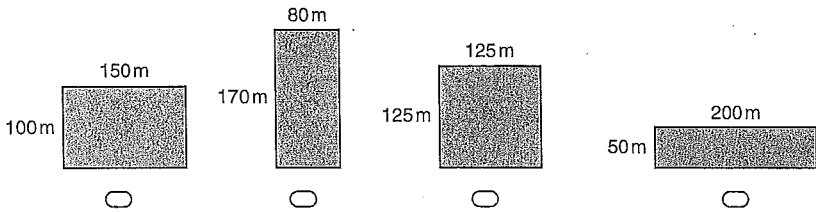If he multiplied his number by 5 and then divided by 2,
the answer would be 30.

What was Sean's number?   _____

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A farm has 4 paddocks.

Which paddock has the largest area?

Shade one bubble.

80 m

150 m

170 m

125 m

100 m

125 m

200 m

50 m

○　　　　○　　　　○　　　　○

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

○　　　　○　　　　○　　　　○

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

○　　　　○　　　　○　　　　○

12 What number will make this number sentence true?
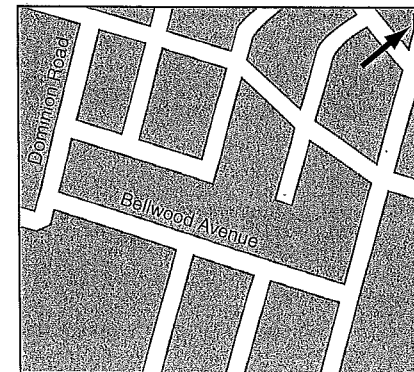
Write your answer in the box.

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

13
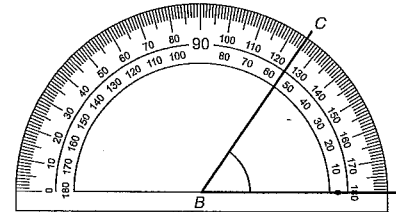
What is the size of angle ABC? $\boxed{}$ °
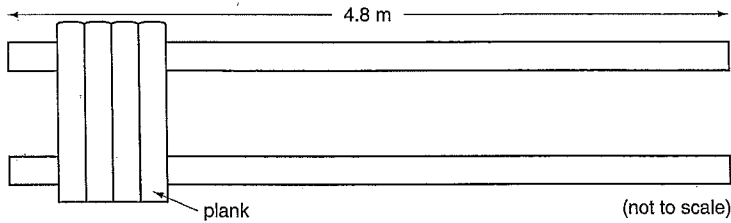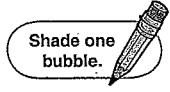
14

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

○　　　　○　　　　○　　　　○

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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.

|← 4.8 m →|

plank   (not to scale)

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

- ○ 4.8 ÷ 0.12
- ○ 0.12 ÷ 4.8
- ○ 4.8 × 0.12
- ○ 4.8 − 0.12

$45 \times \blacklozenge = 18$

What is the value of $\blacklozenge$?

$\frac{2}{5}$ $\frac{3}{5}$ $\frac{5}{2}$ $\frac{5}{3}$
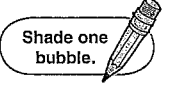
○   ○   ○   ○

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

○   ○   ○   ○

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

How much did Zoe pay for the bike?

$63 $357 $378 $405
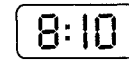
○   ○   ○   ○

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

What fraction of the flowers are blue?

$\frac{18}{12}$ $\frac{6}{12}$ $\frac{3}{4}$ $\frac{2}{3}$

○   ○   ○   ○

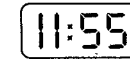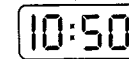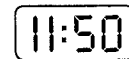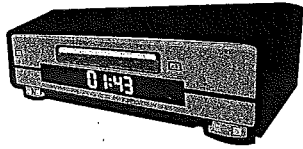**20** Harry sets his watch and his alarm clock to different times.

Watch   Alarm clock

When his alarm clock shows [clock] what time does his watch show?

[11:50]   [10:50]   [12:20]   [11:55]

○   ○   ○   ○

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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?
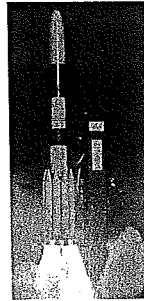
☐

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

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
  ○   ○   ○   ○

---

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
○   ○   ○   ○

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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:

Child amount = (Adult amount × Age of child) ÷ (Age of child + 12)

Use this rule to complete the table.

Write your answer in the box.

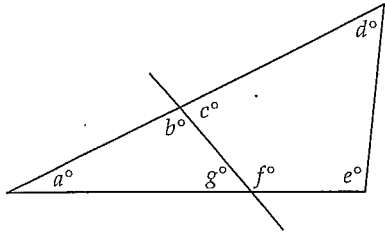| Adult amount (mL)	Age of child (years)	Child amount (mL)
10	8	

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A triangle is divided into 2 parts by a straight line.

The angles are then labelled.
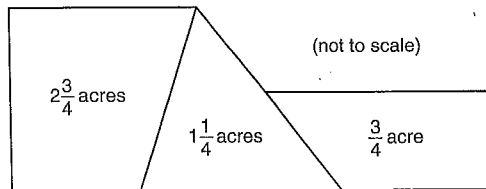
Which statement is true about the sum of angles?

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

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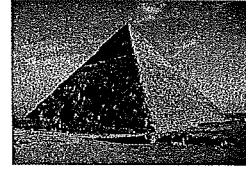Their areas are measured in **acres**.

(not to scale)

$2\frac{3}{4}$ acres

$1\frac{1}{4}$ acres

$\frac{3}{4}$ acre

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
◯	◯	◯	◯

30 This pyramid has a square base.

The area of the square base is 52 900 m².

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
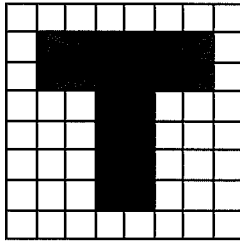and the same number of 150° angles.
It has no other angles.

The polygon is

a pentagon.	a hexagon.	an octagon.	a decagon.
◯	◯	◯	◯

END OF TEST

NAPLAN Numeracy (with calculator) Year 7 2009
Quick Answers

1.

2. 4

3. 115

4. 55

5. 23.5 km

6. 7 687 000

7. −2

8. 12

9.
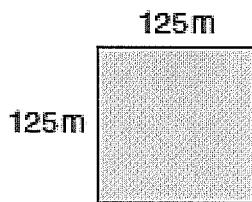
10. 6250

11. Clarke

12. 4.5

13. 55°

14. South-West

15. $4.8 \div 0.12$

16. $\dfrac{2}{5}$

17. $7.60

18. $357

19. $\dfrac{2}{3}$

20. 11:50

21. 2:36

22. 1397 km/h

23. $100 000

24. 51

25. 40

26. $4 \times 3 \times 5$

27. 4 mL

28. $c + d + e + f = 360$

29. 1.92

30. 230 m

31. 57

32. an octagon.