

MCEECDYA

Ministerial Council for Education,
Early Childhood Development and Youth Affairs

NATIONAL ASSESSMENT PROGRAM
LITERACY AND NUMERACY

NUMERACY

CALCULATOR ALLOWED



YEAR
7
2010

SESSION 1

0:40

Time available for students to
complete test: 40 minutes

Use 2B or HB
pencil **only**



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Do not write on this page.

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 Use numbers to write one dollar and seventy-five cents.

Write your answer in the box.

\$

P3 268 cents equals

Write your answer in the boxes.

dollars and cents.

P4 Twenty-seven can be written as

2	7
---	---

Seventy-six can be written as

--	--

YEAR 7 NUMERACY (CALCULATOR ALLOWED)



1

This is part of Laura's school timetable.

Shade one bubble.

Start time	Monday	Tuesday	Wednesday
8:45 am	English Room 9	Mathematics Room 21	English Room 21
10:30 am	Recess	Recess	Recess
10:45 am	Mathematics Room 22	English Room 15	Music Room 9
12:15 pm	Lunch	Lunch	Lunch
1:05 pm	Health Room 21	Art Room 11	Mathematics Room 15
2:00 pm	Sport Gym	Science Room 22	Science Room 22

What room is Laura in at 1:45 pm on Wednesday?

Room 22 Room 21 Room 15 Room 9

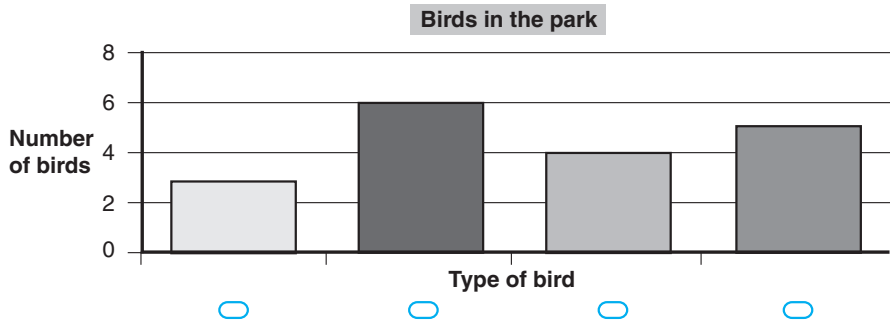
☐ ☐ ☐ ☐

2

For 3 days, Bella made a tally of the birds she saw in a park. This table shows her results.

Type of bird	Monday	Tuesday	Wednesday
Kookaburra			
Magpie			
Galah			
Rosella			

Which column on the graph below shows the total number of Galahs?



YEAR 7 NUMERACY (CALCULATOR ALLOWED)



3

A tap is dripping into a bucket.

This table shows the total number of drops in the bucket after each minute.

Minutes	Total number of drops
1	3
2	6
3	9
4	12



Shade one bubble.



How many drops are in the bucket after 10 minutes?

15

☐

20

☐

25

☐

30

☐

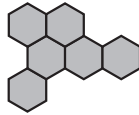
4

Joe made this design by joining six tiles together.

The tiles are grey on all faces.



Which of these could **not** be Joe's design?

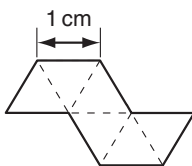

☐

☐

☐

☐

5

This shape is made with 6 equilateral triangles.



What is the perimeter of the shape?

6 cm

☐

8 cm

☐

10 cm

☐

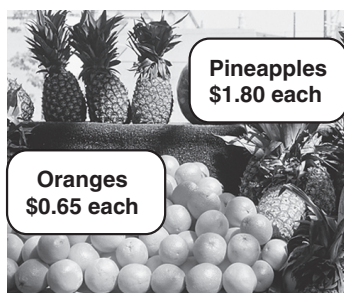
18 cm

☐

YEAR 7 NUMERACY (CALCULATOR ALLOWED)



6



Write your answer in the box.

Alan buys 5 oranges and one pineapple from this market stall.

How much does Alan pay for the fruit **altogether**? \$.

7



Shade one bubble.

Which of these is the best estimate for the mass of this hammer?

30 grams

☐

300 grams

☐

30 kilograms

☐

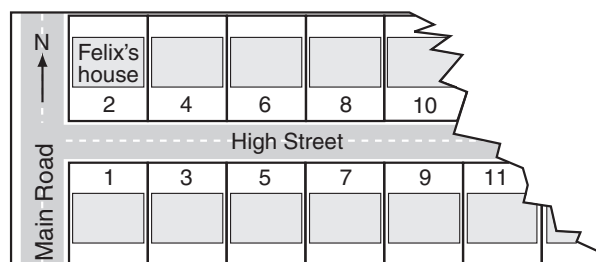
300 kilograms

☐

8

This is part of the map of High Street.

Felix lives at number 2 which is the 1st house on the north side.



What is the number of the 18th house in High Street on the north side?

9

☐

18

☐

36

☐

38

☐

YEAR 7 NUMERACY (CALCULATOR ALLOWED)



Use the following information for questions 9 and 10.

This table shows the number of people who attended sport training on weekdays over 4 weeks.

DAILY ATTENDANCE				
	Week 1	Week 2	Week 3	Week 4
Monday	82	44	39	63
Tuesday	77	56	75	58
Wednesday	55	52	59	67
Thursday	35	41	37	39
Friday	28	24	32	24

Shade one bubble.



9 Which day had the greatest total attendance over the 4 weeks?

Monday

☐

Tuesday

☐

Wednesday

☐

Thursday

☐

10 What was the mean (average) number of people who attended sport training on Fridays?

24

☐

26

☐

27

☐

28

☐

11 In a netball season, Josie had 480 shots for goal. She scored 210 goals and missed the rest.

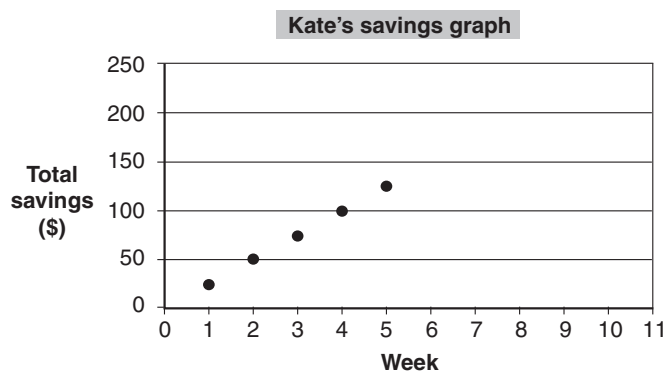
Josie's success rate of scoring goals was

- ☐ less than 25%
- ☐ more than 25% but less than 50%
- ☐ more than 50% but less than 75%
- ☐ more than 75%

YEAR 7 NUMERACY (CALCULATOR ALLOWED)



- 12** Kate saves the same amount of money each week.
At the end of each week she adds a point to this graph of her total savings.



Write your answer
in the box.

What will be the **exact** total amount saved by Kate at the end of week 9?

\$

- 13** Luke drew a shape with:
- exactly 2 pairs of parallel sides, and
 - exactly 2 acute angles.

Shade one
bubble.

Which drawing could be Luke's?



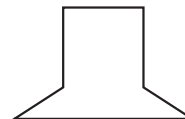
☐



☐



☐



☐

- 14** Helen paid \$4465 for some sheep.
She paid the same amount of money for each sheep.
The cost of each sheep was a whole number of dollars.
Which of the following could be the number of sheep
Helen bought?



43

☐

45

☐

47

☐

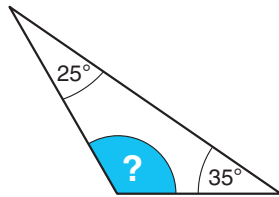
49

☐

YEAR 7 NUMERACY (CALCULATOR ALLOWED)



15



Shade one bubble.



What is the size of the shaded angle?

115°

☐

120°

☐

130°

☐

145°

☐

16

Last year 3684 people went to a music festival.
The number of people who went to the festival
this year was $\frac{2}{3}$ of last year's figure.

How many people went to the festival this year?



1228

☐

2442

☐

2456

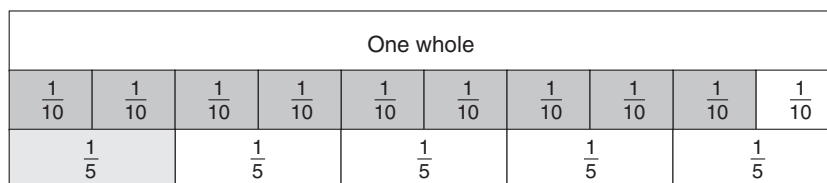
☐

5526

☐

17

The fractions $\frac{9}{10}$ and $\frac{1}{5}$ have been shaded on this fraction wall.



What is $\frac{9}{10} - \frac{1}{5}$ equal to?

$\frac{8}{5}$

☐

$\frac{7}{10}$

☐

$\frac{8}{10}$

☐

$\frac{9}{10}$

☐

YEAR 7 NUMERACY (CALCULATOR ALLOWED)



- 18** A prize of \$5934 is shared equally among 15 friends.
How much does each person get in **dollars** and **cents**?

Write your answer
in the boxes.

dollars and cents

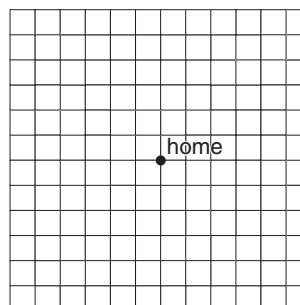
- 19** Zoe is 3 years **older** than Sarah.
Emma is 4 years **older** than Sarah.
Which equation shows how Zoe's age relates to Emma's age?

Shade one
bubble.

- ☐ Zoe's age = Emma's age - 1
☐ Zoe's age = Emma's age + 1
☐ Zoe's age = Emma's age - 7
☐ Zoe's age = Emma's age + 7

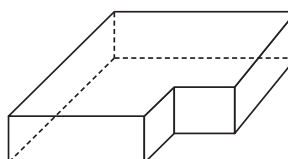
- 20** Adam leaves home and cycles 6 km west,
then 4 km north.
He records this trip as 6W, 4N.
Which of these trips takes Adam home again?

- ☐ 3W, 2N, 3W, 2N
☐ 2W, 2N, 4W, 6S
☐ 3E, 2S, 3E, 4S
☐ 2E, 2N, 4E, 6S



- 21** This diagram represents a 3D object.
The object is a

- ☐ hexagonal prism.
☐ hexagonal pyramid.
☐ rectangular prism.
☐ rectangular pyramid.



YEAR 7 NUMERACY (CALCULATOR ALLOWED)



- 22** Which of these numbers is a multiple of both 7 and 11?

711

☐

777

☐

7117

☐

7777

☐

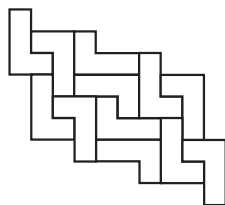
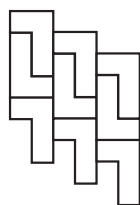
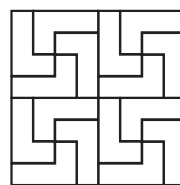
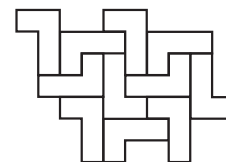
Shade one bubble.



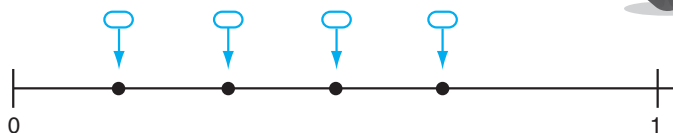
- 23** Harry has these L-shaped tiles.
They are white on one side and black on the other side.
Harry wants to make a pattern with all the tiles **white** side up.



Which one of these patterns can Harry **not** make?


☐

☐

☐

☐

- 24** Kim throws a standard 6-sided die.
Which point on the number line best shows the chance of Kim throwing a 2?



- 25** An electrician calculates the price of a job using a service fee and an amount **per hour**.
This table shows some of the job prices.

Hours	2	4	5	6
Job price	\$160	\$252	\$298	\$344

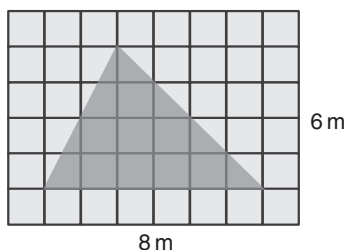
How are the job prices calculated?

- ☐ \$80 service fee + \$40 per hour
☐ \$80 service fee + \$80 per hour
☐ \$68 service fee + \$92 per hour
☐ \$68 service fee + \$46 per hour

YEAR 7 NUMERACY (CALCULATOR ALLOWED)



- 26 This rectangular courtyard measures 6 m by 8 m.
A triangle is marked out on the courtyard.



Write your answer in the box.

What is the area of the triangle? square metres

- 27 Jamie surveyed all the Year 7 students at his school about their favourite sport.

Favourite sport	Number of students
Basketball	85
Cricket	35
Football	55
Netball	75

Shade one bubble.

Which sport did 3 out of every 10 Year 7 students choose as their favourite?

Basketball ☐
 Cricket ☐
 Football ☐
 Netball ☐

- 28 Dan has started to cover a rectangular floor with tiles.
The tiles are twice as long as they are wide.

The floor is $10\frac{1}{2}$ tiles wide and $18\frac{1}{2}$ tiles long.



Write your answer in the box.

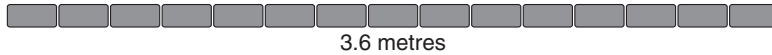
Using this pattern, what is the **total** number of tiles Dan will use to cover the floor?

YEAR 7 NUMERACY (CALCULATOR ALLOWED)



29

Rob is building a brick wall that is 6 metres long.
The length of a row of 15 bricks is 3.6 metres as shown.



Write your answer
in the box.

How many bricks will Rob need for a row 6 metres long?

30

A shoe shop has a sale.



Was \$95
Sale price is 20% off



Was \$90
Sale price is 25% off

What is the **difference** in the sale prices of these two pairs of shoes?

\$

31

A gardening company uses the following rule to calculate the cost of sand.

cost in dollars = (\$49.50 × volume in cubic metres) + (\$5.90 × delivery distance in km)

Michelle paid the company \$653 for
12 cubic metres of sand.

What delivery distance was Michelle charged for?

km



32

Pam's new car uses 4.9 litres of fuel per 100 km.
Her old car used 7.5 litres of fuel per 100 km.
Pam pays \$1.10 per litre and drives 10 000 km each year.

How much money will Pam **save** on fuel each year with her new car?

\$

STOP – END OF TEST