

Prepare for NAPLAN Year 7

Instructions:

1. Complete questions in this preparation quiz (Test 1)
2. Have students mark their own quiz using the answer sheet provided

2

Two scale models of The Statue of Liberty are compared.

Model A has a scale of 1 : 400 and model B has a scale of 2 : 300

Which model is taller?

Model A Model B Both are the same height

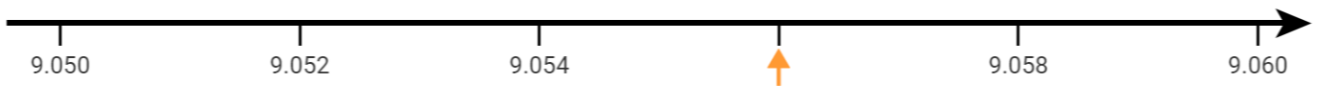
Mangahigh activity: Use ratio and proportion (drawings and models) **X**

3. For each incorrect answer, complete the suggested 'Mangahigh activity'
4. Login to Mangahigh and use the 'Browse all activities' option, and type in the title of the Mangahigh activity. Complete the activity and earn a minimum of Bronze medal.
5. Once students have completed all Mangahigh activities previously marked as incorrect, they are ready to complete the post-prep quiz
6. Complete the post-prep quiz (Test 2)

YEAR 7 NUMERACY – TEST 1

1

A number is missing on this number line.



Which one of the following is the missing number?

9.056

9.058

9.062

9.900

Mangahigh activity: **Order decimals**

2

Two scale models of The Statue of Liberty are compared.

Model A has a scale of 1 : 400 and model B has a scale of 2 : 300

Which model is taller?

Model A

Model B

Both are the same height

Mangahigh activity: **Use ratio and proportion (drawings and models)**

3



I spend 25 c. I pay with this coin.
How much change do I get?

85 c

75 c

65 c

25 c

Mangahigh activity: **Work with money**

YEAR 7 NUMERACY – TEST 1

4

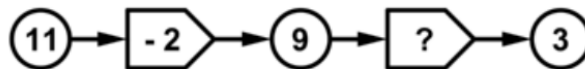
You can calculate $896 - 462$ by subtracting the hundreds, tens and ones.

$$\begin{array}{r} 896 \\ - 462 \\ \hline \end{array}$$

Mangahigh activity: **Add and subtract large numbers mentally**

5

What is the missing operation in this number machine?



$- 9$

$\div 3$

$- 3$

$\times 3$

Mangahigh activity: **Use number machines**

6

The temperature in the afternoon was -4°C and fell by 3°C .

What is the temperature now?

-1°C

-7°C

1°C

-6°C

Mangahigh activity: **Use negative numbers
Extending the number line – Pinata Fever**

YEAR 7 NUMERACY – TEST 1

7

Which of the following is $\frac{2}{5} \times 650$?

420

390

130

260

Mangahigh activity: **Find a fraction of an amount: standard examples**
Multiply with fractions

8

A car used to cost \$5000, but the dealership increased the price by 10%.

How much is the car worth now?

\$6000

\$6500

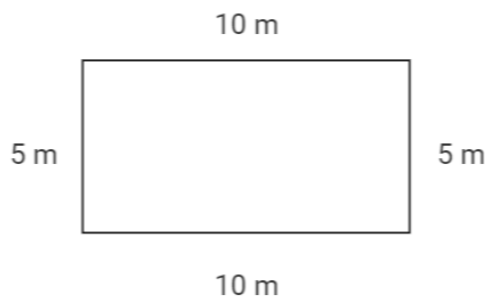
\$5500

\$4500

Mangahigh activity: **Find percentages – calculator**
Calculate percentage discounts

9

The rectangle below shows the shape and measurements of a garden.



NOT TO SCALE

Which one of the following shows the distance in metres around the edge of the garden?

10m

15m

5m

30m

Mangahigh activity: **Solve word problems**
Use parentheses

YEAR 7 NUMERACY – TEST 1

10

The n th term of a sequence is $7n + 3$.

Noah works out the first three terms of the sequence.

Which **one** of the following shows the first three terms?

10, 14, 21

71, 72, 73

21, 24, 27

10, 17, 24

Mangahigh activity: **Use n th term to generate linear sequences**
Describe patterns and linear rules

11

Which one of the following is the smallest prime number greater than 11?

12

17

13

15

Mangahigh activity: **Learn about prime factors**

12

A 250g bar of chocolate costs \$1.60



Which calculation works out the cost per kg?

$4 \times \$1.60$

$\$1.60 \div 2.5$

$0.25 \times \$1.60$

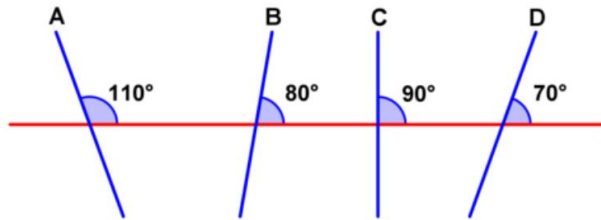
$\$1.60 \div 4$

Mangahigh activity: **Solve word problems**
Find the area of a rectangle

YEAR 7 NUMERACY – TEST 1

13

Perpendicular lines cross at 90°



Which line is perpendicular to the horizontal line?

- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| A | B | C | D |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Mangahigh activity: Recognise perpendicular and parallel lines; Measure angles; Recognise and calculate opposite angles; Recognise and calculate corresponding angles; Understand alternate angles

14

A teacher has 3m of sticky tape.

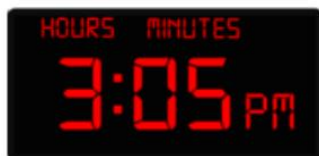
She gives away 25cm to a child.

How much tape does she have left?

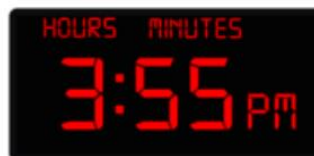
- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 270cm | 250cm | 275cm | 285cm |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Mangahigh activity: Calculate with length; Use and convert metric units

15



went out



came back

How long did I go out for?

- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 45 minutes | 35 minutes | 10 minutes | 50 minutes |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Mangahigh activity: Use the digital clock; Measure time; Record and compare seconds, minutes and hours; Convert between units of time

YEAR 7 NUMERACY – TEST 1

16

A jug has 675mL of water.

150mL is poured into a glass.

How much is left in the jug?

550mL

575mL

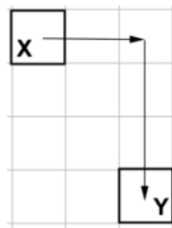
525mL

425mL

*Mangahigh activity: Calculate with capacity;
Convert units of capacity; Convert metric units of weight*

17

A man walks from square X to square Y. The path that he takes is shown by the arrows. Which of these describes the path taken by the man?



DOWN 3 squares
RIGHT 2 squares

RIGHT 2 squares
DOWN 3 squares

RIGHT 2 squares
DOWN 2 squares

*Mangahigh activity: Learn about position and direction;
Use compass directions*

18

Which of the following calculations gives the same result as $4 \times 3 \times 6$?

$3 \times 6 \times 5$

$2 \times 3 \times 7$

$6 \times 4 \times 3$

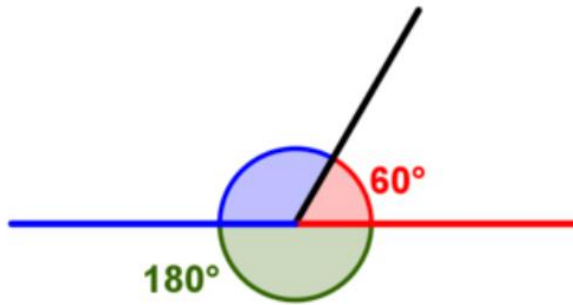
$4 \times 5 \times 7$

Mangahigh activity: Relate addition to multiplication

YEAR 7 NUMERACY – TEST 1

19

The angle between the red line and blue line is 180°



What is the angle between the black line and the blue line?

140°

100°

120°

80°

Mangahigh activity: **Calculate angles around a point**
Identify types of angle

20

In a box there are 10 cards with numbers, 5 cards with pictures and 6 with letters.

The total number of cards in the box is _____

21

20

22

19

Mangahigh activity: **Understand likelihood of events**
Design data collection sheets, List possible outcomes from a single event

21

The temperature in Mexico is recorded for five consecutive days.

The temperatures were as follows: 25°C , 30°C , 35°C , 30°C , 40°C .

What is the mean temperature?

32°C

31°C

34°C

33°C

Mangahigh activity: **Find the mean**
Interpret raw data

YEAR 7 NUMERACY – TEST 1

22

3×9 is the same as $3 \times 5 + 3 \times$ _____

Which one of these answers is correct?

3

6

5

4

Mangahigh activity: Recognise place value: hundreds, tens and units, Relate addition to multiplication, Divide, Divide by 5, Divide by decimals

23

What fraction is not shaded?



$\frac{3}{8}$

$\frac{3}{5}$

$\frac{8}{5}$

$\frac{5}{8}$

Mangahigh activity: Use fractions, Identify equivalent fractions

24

Which one of the following shows two numbers that give the same result when you round them to two decimal places?

2.167 and
2.174

9.309 and
9.301

8.935 and
8.934

6.373 and
6.362

Mangahigh activity: Round decimals that have up to three decimal places

YEAR 7 NUMERACY – TEST 1

25

$23\,000\text{ mm} = \underline{\hspace{2cm}}\text{ m}$

23m

2300m

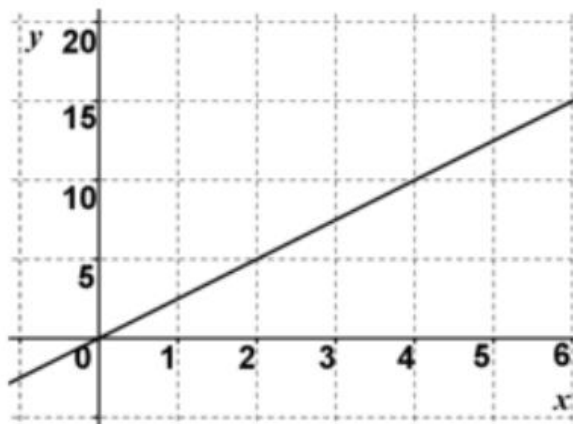
2.3m

230m

Mangahigh activity: Multiply and divide whole numbers by 10, 100 and 1000

26

The graph shows the cost (y axis) of buying a number of roof tiles (x axis). What is the cost of buying 6 roof tiles?



\$10

\$12

\$5

\$15

Mangahigh activity: Plot and interpret real-life straight line graphs

27

Ethan shares \$60 with his friend in the ratio 1 : 5.

Which one of the following shows the amount that Ethan gets?

\$60

\$30

\$10

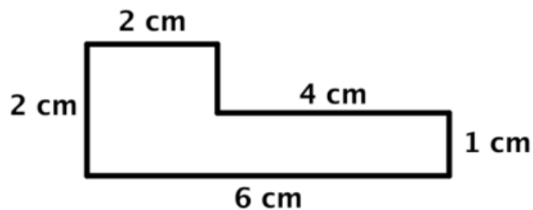
\$50

Mangahigh activity: Solve problems with ratios

YEAR 7 NUMERACY – TEST 1

28

Find the perimeter of this shape.



18cm

14cm

15cm

16cm

*Mangahigh activity: Calculate the perimeter of complex shapes
Enlarge on a grid*

29

The table shows the favourite colour of 30 students in a class. What colour is the most popular?

Favourite colour	Red	Blue	Green	Yellow	Purple
Number of students	4	8	7	6	5

blue

red

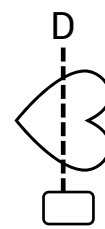
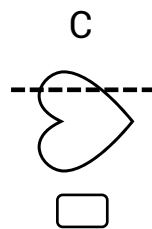
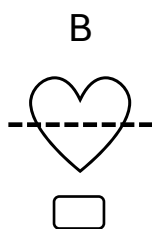
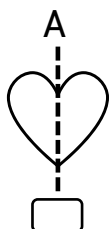
yellow

green

*Mangahigh activity: Construct and interpret frequency tables;
use frequency tables*

30

This shape has one line of symmetry. Find it.



Mangahigh activity: Identify and draw lines of symmetry

Answer sheet

TEST 1	TEST 2
1. 9.056	P1. 3.314 and 3.317
2. Model A	P2. 6
3. 75c	P3. \$3.40
4. 434	P4. 353
5. $\div 3$	P5. 21
6. -7°C	P6. 4 - 5
7. 260	P7. 4450
8. 4500	P8. He has more than enough money
9. 30m	P9. \$6.20
10. 10, 17, 24	P10. 2, 6, 10
11. 13	P11. 37
12. 4 x \$1.60	P12. \$3.10
13. C	P13. 3cm
14. 275cm	P14. 335cm
15. 50 minutes	P15. 3:15pm
16. 525mL	P16. 450mL
17. RIGHT 2 squares DOWN 3 squares	P17. T
18. 6 x 4 x 3	P18. 3 x 6 x 7
19. 120°	P19. 190°
20. 20	P20. $\frac{1}{6}$
21. 32°C	P21. 21
22. 4	P22. 2
23. $\frac{5}{8}$	P23. $\frac{7}{9}$
24. 2.167 and 2.174	P24. 4.896 and 4.903
25. 23m	P25. 83000 \div one million
26. \$15	P26. C
27. \$10	P27. \$7
28. 16cm	P28. Turkey
29. blue	P29. 3
30. A	P30. A

Post-preparation NAPLAN Year 7 (TEST 2)

Instructions:

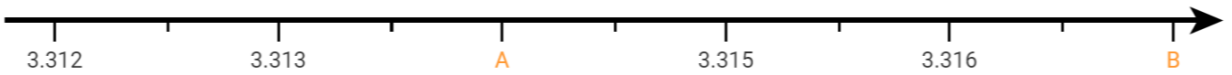
Once students have completed all Mangahigh activities previously marked as incorrect, they are ready to complete the post-preparation quiz

Questions in the post-preparation NAPLAN quiz is marked as P1, P2, P3 etc.

YEAR 7 NUMERACY – TEST 2

P1

There are **two numbers** missing on this number line.



Which one of the following are the missing numbers?

3.3 and
3.317

3.314 and
3.317

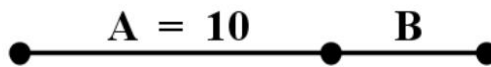
3.315 and
3.318

3.3 and
3.317

P2

The ratio of length A to length B is 5 : 3

What is the length of segment B?



8

6

5

3

P3



How much?

\$4.03

\$3.40

\$3.04

\$4.30

YEAR 7 NUMERACY – TEST 2

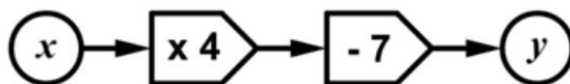
P4

Complete the subtraction calculation.

$$\begin{array}{r} 974 \\ - 621 \\ \hline \end{array}$$

P5

What is the output y when you use the input $x = 7$?



14

21

7

28

P6

The temperature in the afternoon was 4°C from -5°C .

Which one of the following calculations shows how to work out the new temperature?

$4 - 5$

$4 + 5$

$5 - 4$

$-5 - 4$

YEAR 7 NUMERACY – TEST 2

P7

4500 students attend Manga High School.

Last Friday, $\frac{1}{90}$ of the students were absent.

Which **one** of the following shows how many students were **present** last Friday?

4430

4450

4410

4440

P8

John checks the money in his wallet.



He wants to buy a table that used to cost \$140,
but has now been reduced by 25%

Which of these is correct?

He has exactly
enough money

He doesn't have
enough money

He has more than
enough money

P9

Mrs Warren is going shopping, and has \$40.00.

She buys shoes and books costing \$33.80.

Which ones of the following shows how much money is left?

\$6.20

\$6.30

\$5.20

\$7.20

YEAR 7 NUMERACY – TEST 2

P10

The n th term of a sequence is $4n - 2$.

William works out the first three terms of the sequence.

Which **one** of the following shows the first three terms?

40, 41, 42

2, 6, 10

4, 8, 12

4, 3, 2

P11

Emily thinks of a number.

She says, 'It is the greatest prime number less than 40.'

Which **one** of the following numbers is she thinking of?

31

35

39

37

P12

1 litres is the same as 1000mL.



What is the price of this drink per litre?

\$3.10

\$3.25

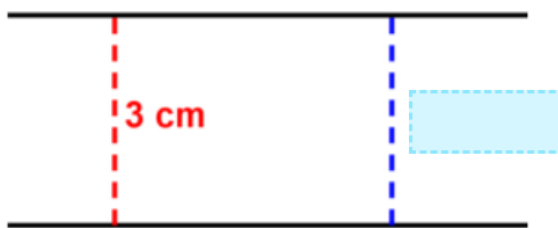
\$4.65

\$3.05

YEAR 7 NUMERACY – TEST 2

P13

These two lines are parallel.



What is the distance between the two lines?

2cm

1cm

4cm

3cm

P14

A teacher has 4m of string.

She gives away 65cm to a child.

How much string does she have left?

340cm

345cm

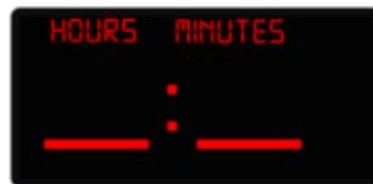
330cm

335cm

P15



Lesson starts



Lesson ends

Peter's maths lesson lasts 1 hour and 20 minutes. What time does it end?

3:25pm

3:15pm

2:35pm

2:45pm

YEAR 7 NUMERACY – TEST 2

P16

A jug has 775mL of water.

325mL is poured into a glass.

How much is left in the jug?

550mL

475mL

450mL

525mL

P17

A cross is placed in the centre of square D3. It is then moved left 2 squares and down 2 squares. Mark the new position of the cross.

5		U		S	
4					
3			X		
2					
1		T	V		
	A	B	C	D	E

S

T

U

V

P18

Which of the following calculations gives the same result as $7 \times 3 \times 6$?

$3 \times 6 \times 7$

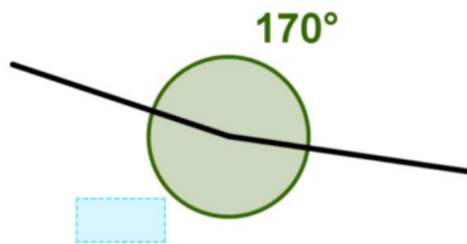
$6 \times 3 \times 5$

$2 \times 7 \times 5$

$9 \times 6 \times 8$

YEAR 7 NUMERACY – TEST 2

P19



What is the missing angle?

180°

190°

90°

80°

P20



A dice is equally likely to land on one of the six numbers from 1 to 6.

What is the probability that it lands on a number 5?

$\frac{1}{3}$

$\frac{1}{6}$

$\frac{1}{5}$

$\frac{5}{6}$

P21

The total number of books owned by a class of students is 420.

The mean number of books that each student owns is 20.

How many students are in the class?

21

440

8400

20

YEAR 7 NUMERACY – TEST 2

P22

3×6 is the same as $3 \times 4 + 3 \times \underline{\quad}$

Which one of these answers is correct?

4

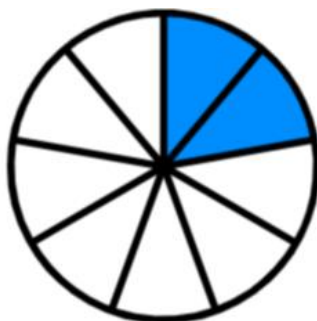
2

9

6

P23

What fraction of the circle is not shaded?



$\frac{7}{9}$

$\frac{2}{7}$

$\frac{2}{9}$

$\frac{9}{7}$

P24

Which one of the following shows two numbers that give the same result when you round them to two decimal places?

0.116 and
0.114

6.263 and
6.267

4.896 and
4.903

8.539 and
8.545

YEAR 7 NUMERACY – TEST 2

P25

Which calculation has the smallest answer?

83000 ÷ one million

8.3 ÷ 10

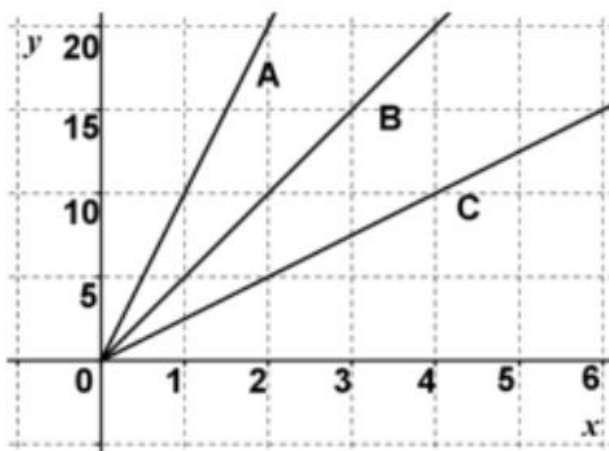
8.3 million ÷ 10000

0.83 x one thousand

P26

The graph shows the time taken in minutes (y axis) to lay floor tiles (x axis). A decorator takes 5 minutes to lay 2 floor tiles.

Which line shows this?



A

B

C

A and B

P27

Alexander and his brother share \$42 in the ratio 1 : 5.

Which one of the following is the amount of money that Alexander gets?

\$8

\$7

\$6

\$9

YEAR 7 NUMERACY – TEST 2

P28

The perimeter of a regular pentagon is 40cm.

Find the length of one side.

5cm

8cm

16cm

10cm

P29

The hair colour of 10 students was recorded as follows:
Blonde, brown, red, brown, black, brown, blonde, red, blonde, blonde

What is the missing number in the table, which shows the number of brown-haired students?

Hair colour	Blonde	Brown	Black	Red
Number of students	4	□	1	2

4

2

3

10

P30

This shape has one line of symmetry. Find it.

