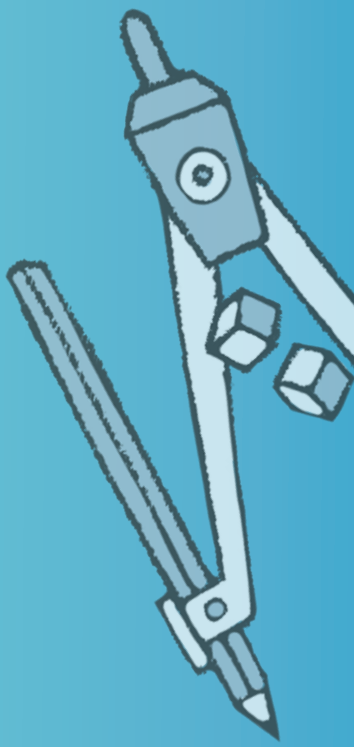
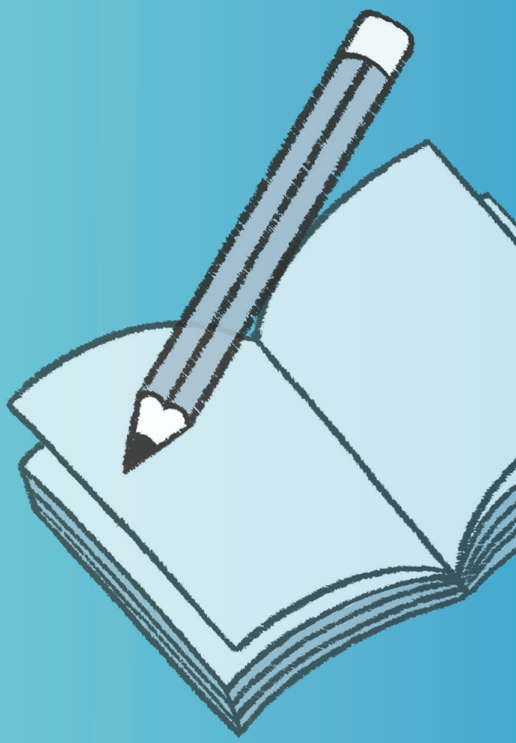
Mathletics

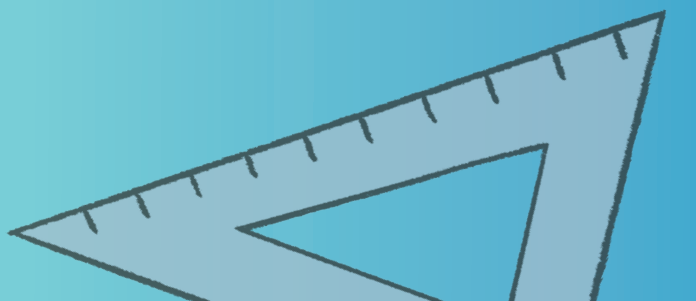
NAPLAN Year 9 Numeracy Test 3

(Non-Calculator)

Answers







A 3P Learning product

1 **In the following table, if you were to cross out the prime numbers as well as the odd numbers greater than 21, then what number would remain?**

2	5	7	11
15	17	19	25
27	33	37	39

15

Write one number in the box.

2 **Which one of the following numbers does not have 4, 5 and 6 as factors?**

260 ● 420 ○ 180 ○ 300 ○ 120 ○

Shade one bubble.

3 **Solve for x:** $\frac{10x - 1}{6} = 9$

–5.5 ○ 5.3 ○ –27.5 ○ 11 ○ 5.5 ●

Shade one bubble.

4 $\sqrt{6000}$ **is between**

60 and 70 ○ 70 and 80 ● 65 and 75 ○ 50 and 60 ○ 80 and 90 ○

Shade one bubble.

5 **78% of a backyard is covered in lawn. The area of the lawn is 39 m^2. How big is the entire backyard?**

177.27 m^2 ○ 30.42 m^2 ○ 11 m^2 ○ 50 m^2 ● 8.58 m^2 ○

Shade one bubble.

6 **50 000 adults and children attended a cricket match. If 32 000 were adults, what percentage were children?**

36 %

Write the answer in the box.

7 **In a certain town there are 6 adults for every 4 children. What is the total population if there are 640 children?**

640	1000	1500	960	1600
○	○	○	○	●

Shade one bubble.

8 **Which one of these numbers would be in the middle after being arranged in ascending order?**

Shade one bubble.

1.5352×10^6	0.15353×10^7	1.5452×10^5	15.4532×10^5	1.5362×10^6
○	●	○	○	○

9 **Liam woke up at 7:36 am and went to bed that night 11:13 pm. How many minutes was Liam awake for?**

983	960	937	877	997
○	○	●	○	○

Shade one bubble.

10 **Akhil decides to save money for charity. On the first day he saves $1, on the second day he saves $2, on the third day he saves $4, and each new day he saves double what he saved the day before. How much money does he save after one week?**

$ 127

Write the answer in the box.

11 **11.372 – 1.693 =** ?

8.679	9.679	9.671	10.671	10.679
○	●	○	○	○

Shade one bubble.

12 **32 ÷ 0.04 =** ?

8	0.8	800	80	0.08
○	○	●	○	○

Shade one bubble.

13 **Consider this triangle.**

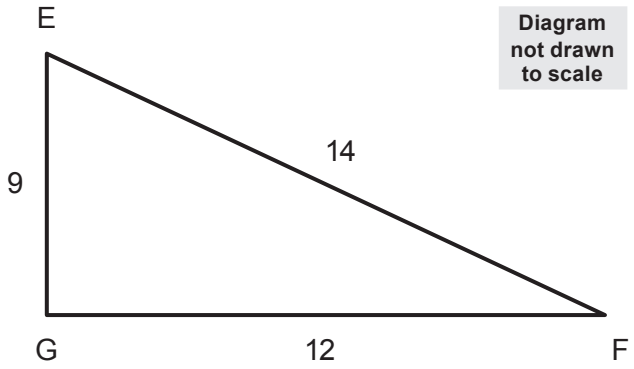


Diagram not drawn to scale

What can we say about angle ∠EGF?

- ● Between 0° and 90°
- ○ Exactly equal to 90°
- ○ Between 90° and 180°
- ○ Exactly equal to 180°
- ○ Bigger than 180°

Shade one bubble.

14 **$7x - 5(x - 3)$ =**

$2x + 15$	$2x - 15$	$2x + 3$	$2x - 3$	$12x + 15$
●	○	○	○	○

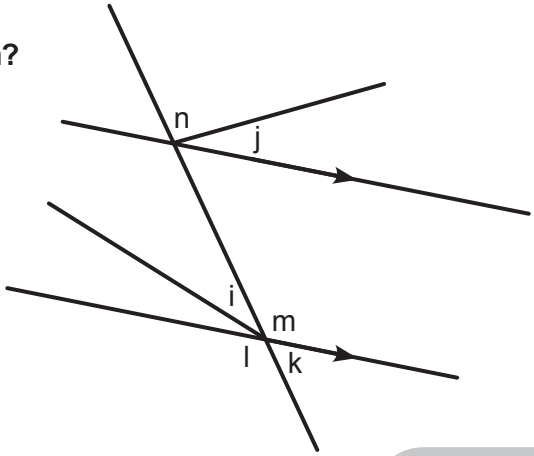
Shade one bubble.

15 **A container contains green and yellow marbles. The ratio of green marbles to yellow marbles is 4:7. If there are 44 marbles in the container, how many yellow marbles are there?**

16	28	4	7	11
○	●	○	○	○

Shade one bubble.

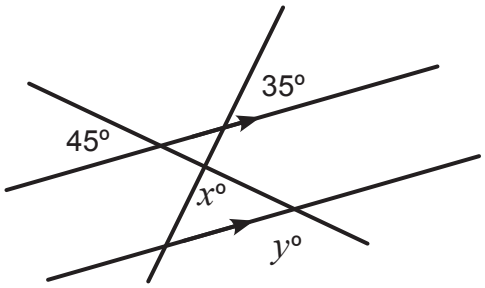
16 **Which angle is supplementary to m?**



i	n	j	l	k
○	○	○	○	●

Shade one bubble.

Use the following diagram for questions 17 and 18



17 **What is the size of angle y?**

180°	145°	35°	135°	45°
○	○	○	●	○

Shade one bubble.

18 **What is the size of angle x?**

70°	80°	90°	110°	100°
○	○	○	○	●

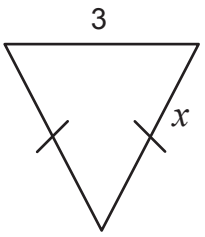
Shade one bubble.

19 **Which of these numbers is the largest?**

1 ÷ 0.1	1 × 0.1	10 × 0.1	10 ÷ 0.1	100 × 0.1
○	○	○	●	○

Shade one bubble.

20 **The following Isosceles triangle has perimeter 11 cm. What is the value of x?**



5	8	4	14	2
○	○	●	○	○

Shade one bubble.

21 **Rania planted a garden using 4 different colours of flowers: red, blue, yellow and orange. If $\frac{1}{3}$ of the flowers are red, $\frac{1}{4}$ of the flowers are blue and $\frac{1}{10}$ of the flowers are yellow, then how many flowers are orange?**

$\frac{19}{60}$

Write the answer in the box.

22 **A school play is attended by adults and students. It costs $5 for students and $10 for adults. The total of all ticket sales was $775. If 83 students attended, how many adults attended?**

36

Write one number in the box.

23 **A parking lot can fit 4 cars for every 6 metres. If each floor is 120 metres long and there are 5 floors, how many cars are there when the parking lot is full?**

400

Write one number in the box.

24 **Solve for x:** $\frac{12x - 9}{6} + 2x + 1 = 3x + 2$

2.5	–5	3.5	–2	4.5
●	○	○	○	○

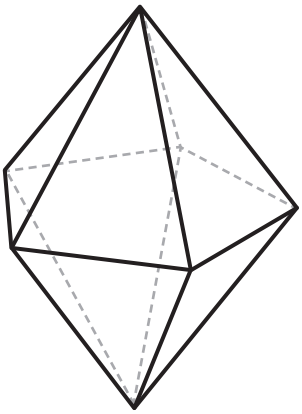
Shade one bubble.

25 **Sarah is 6 years older than triple Lisa's age. While Thanh is 2 years younger than half of Sarah's age. The total of Sarah's, Lisa's and Thanh's ages is 106. How old is Lisa?**

18

Write one number in the box.

26 **What is the surface area of the following decahedron?**



Each face of the decahedron looks like this:

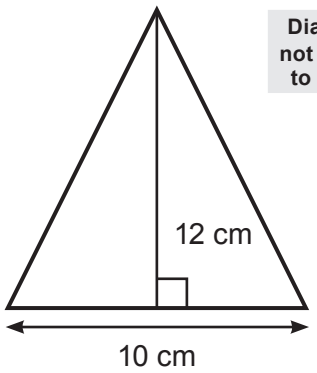


Diagram not drawn to scale

60 cm^2	120 cm^2	600 cm^2	1 200 cm^2	720 cm^2
○	○	●	○	○

Shade one bubble.

27 **The following table represents a sports preference in a certain school. If a year is selected at random, what is the probability that there will be more tennis players than soccer players?**

		Tennis	Soccer
Junior	Year 7	25	35
	Year 8	31	27
Middle	Year 9	22	40
	Year 10	33	22
Senior	Year 11	31	25
	Year 12	30	24

$\frac{172}{345}$ ○ $\frac{2}{3}$ ● $\frac{1}{3}$ ○ $\frac{173}{345}$ ○ $\frac{172}{173}$ ○

Shade one bubble.

28 **Which of these expressions has the same value as $3\sqrt{3} + 9$?**

Shade one bubble.

$\sqrt{3}(\sqrt{9} + 3\sqrt{3})$ ● $\sqrt{3}(\sqrt{9} + 3)$ ○ $3(\sqrt{9} + 3\sqrt{3})$ ○ $\sqrt{3}(\sqrt{9} + \sqrt{3})$ ○ $\sqrt{3}(3\sqrt{9} + 3\sqrt{3})$ ○

29 **The following is folded to form a rectangular box. What is the volume of this newly formed box?**

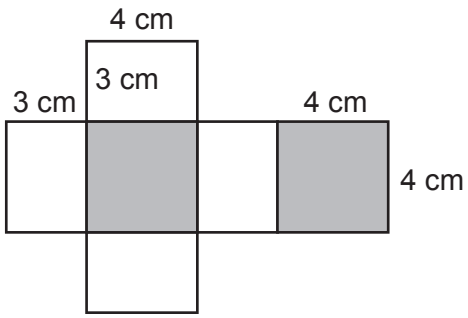


Diagram not drawn to scale

$9\ cm^3$ ○ $16\ cm^3$ ○ $14\ cm^3$ ○ $36\ cm^3$ ○ $48\ cm^3$ ●

Shade one bubble.

30 **What is the ratio of the volume of a cube of side length 2 cm to the volume of a cube of side length 4 cm?**

1:2 ○ 2:1 ○ 1:4 ○ 4:1 ○ 1:8 ●

Shade one bubble.

END OF TEST

