EXAM PAPER

Maths Year 8 — Practice Exam 2

PREVIEW
This file has the first 30 of the 60 questions in this paper. The rest is locked: it comes with a PrepNest plan, or with the paper itself for VCE.

Total time: 80 minutes

SECTIONS IN THIS PAPER

- Numeracy — non-calculator — 40 min (no calculator)
- Numeracy — calculator — 40 min (calculator allowed)

INSTRUCTIONS

Answer every question you can. Write your working in the space provided for long-answer questions. Marking guidance and full explanations are provided in the separate answer key.

Numeracy — non-calculator

40 minutes • No calculator

1. Use the train timetable.
How long does the train take to travel from Central to Katoomba?

Station	Time
Central	14:48
Strathfield	15:02
Parramatta	15:14
Penrith	15:48
Katoomba	16:55

A. 1 h 53 min

B. 2 h 47 min

C. 3 h 7 min

D. 2 h 7 min

2. How many cubic centimetres are in 1 litre?

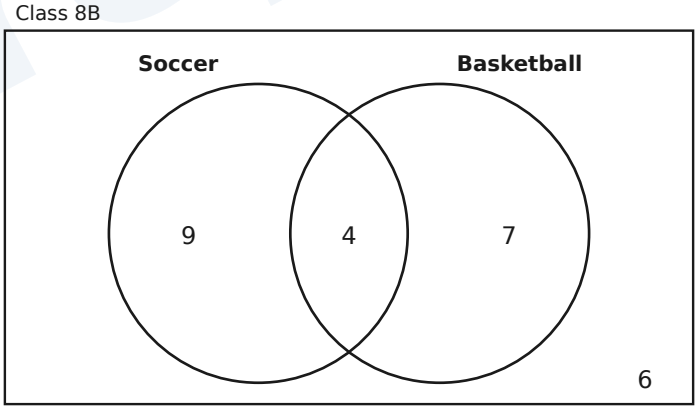
A. 10

B. 100

C. 1000

D. 1 000 000

3. The Venn diagram shows the students in a class who play soccer and who play basketball.
How many students play soccer but not basketball?



A. 4

B. 13

C. 20

D. 9

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4. Which expression is equal to $2(3x - 4)$?

A. $6x - 8$

B. $6x - 4$

C. $5x - 6$

D. $6x + 8$

5. Which statement is always true for a rhombus?

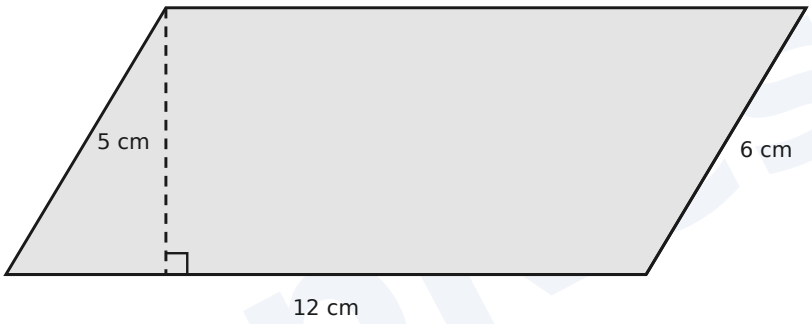
A. All its angles are 90°.

B. All four sides are equal in length.

C. Its diagonals are equal in length.

D. It has exactly one pair of parallel sides.

6. What is the area of the parallelogram?



not to scale

A. 60 cm²

B. 30 cm²

C. 34 cm²

D. 72 cm²

7. What is $-6 \times (-4)$?

A. -24

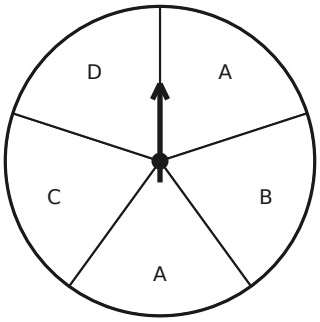
B. -10

C. 2

D. 24

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8. The spinner has 5 equal sectors.
What is the probability that it does not land on A?



A. 1/5

B. 2/5

C. 3/5

D. 4/5

9. The thermometer shows the temperature in Thredbo at 6 am.
By 2 pm the temperature had risen by 11 degrees.
What was the temperature at 2 pm?



A. 7 °C

B. −7 °C

C. 15 °C

D. −15 °C

10. Which of these fractions is equal to a decimal that repeats forever?

A. 3/8

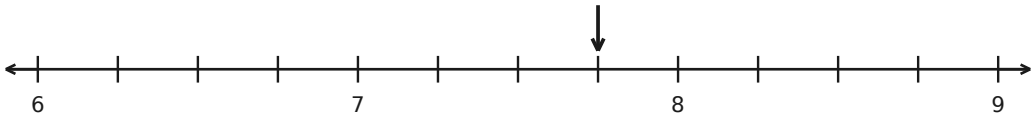
B. 7/20

C. 2/9

D. 9/25

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11. Which number is closest to the position of the arrow?



A. √60

B. √40

C. √50

D. √70

12. What is the sum of the interior angles of a hexagon?

A. 360°

B. 540°

C. 720°

D. 1080°

13. A dice numbered 1 to 6 is rolled once.
What is the probability that the number is greater than 4 or even?

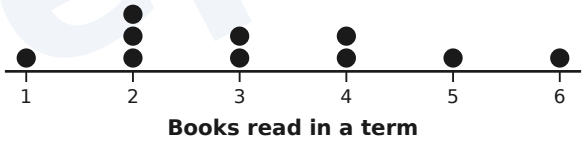
A. 1/2

B. 5/6

C. 1/3

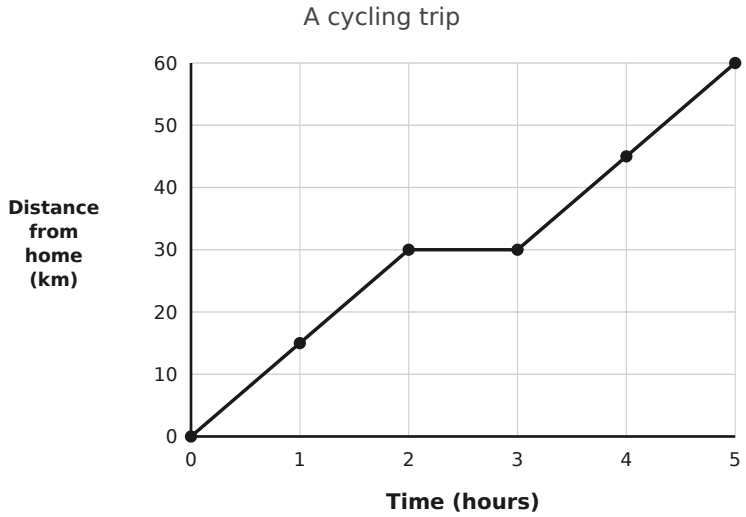
D. 2/3

14. The dot plot shows how many books 10 students read in a term.
What is the median?



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15. The graph shows a cyclist’s distance from home.
What was the cyclist’s speed during the first 2 hours?



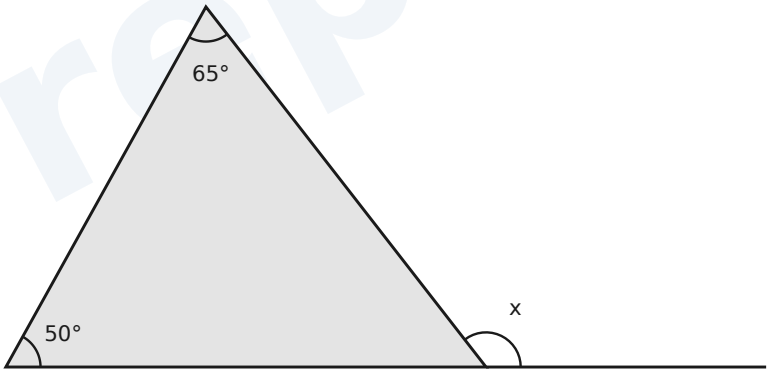
A. 7.5 km/h

B. 15 km/h

C. 30 km/h

D. 60 km/h

16. One side of the triangle has been extended. What is the value of x, in degrees?



not to scale

17. Which expression is equal to $12x^2y \div 4xy$?

A. 3xy

B. 8x

C. $3x^2$

D. 3x

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18. In parallelogram ABCD, angle A is 70°. What is the size of angle B?

A. 20°

B. 70°

C. 110°

D. 290°

19. Which equation fits every pair of values in the table?

x	−1	0	1	2
y	5	3	1	−1

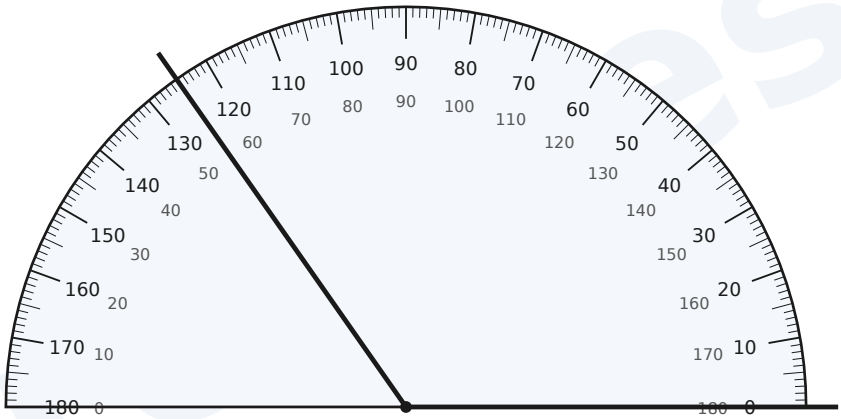
A. y = 2x + 3

B. y = 3 − 2x

C. y = 3x − 2

D. y = −2x − 3

20. What is the size of the angle shown on the protractor?



A. 55°

B. 115°

C. 125°

D. 135°

21. What is the median score?

Scores in a darts competition

Stem	Leaf
3	1 4 6
4	0 2 2 8
5	3 5
6	0 7

Key: 4 | 2 means 42

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22. Which of these is equal to $(3^2)^3$?

A. 3^5

B. 3^6

C. 3^9

D. 6^3

23. The table shows the change in the number of cars in a car park each hour.
There were 120 cars in the car park at 9 am.
How many cars were there at 1 pm?

Hour	Change in number of cars
9 am – 10 am	+38
10 am – 11 am	−15
11 am – 12 pm	+22
12 pm – 1 pm	−41

A. 114

B. 124

C. 134

D. 236

24. Which is the fully factorised form of $15x + 10$?

A. $5(3x + 10)$

B. $15(x + 10)$

C. $3(5x + 2)$

D. $5(3x + 2)$

25. A shop buys a hat for $40 and sells it for $50.
What is the profit as a percentage of the cost price?

A. 10%

B. 20%

C. 25%

D. 125%

26. The decimal 0.333... repeats forever. Which fraction is equal to it?

A. 3/10

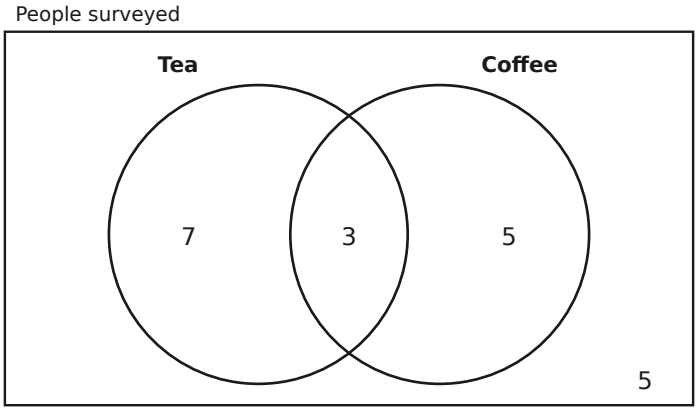
B. 33/100

C. 1/30

D. 1/3

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27. One person is chosen at random.
What is the probability that the person likes tea or coffee (or both)?



A. 3/20

B. 1/4

C. 1/2

D. 3/4

28. Kai thinks of a number.
He multiplies it by 3, then subtracts 5.
The answer is 4 more than the number he first thought of.
What was his number?

A. 1.5

B. 3

C. 4.5

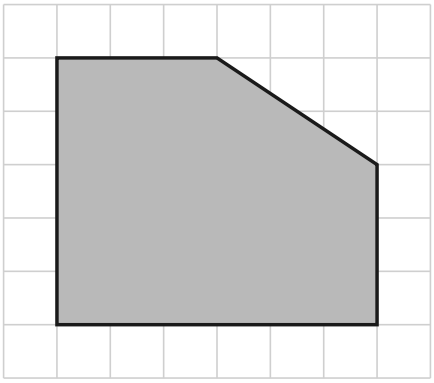
D. 9

29. The cost of a taxi ride is C = 2.5k + 4, where C is the cost in dollars and k is the distance in kilometres.
Joel’s ride cost $29.
How far did he travel?

km

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30. What is the area of the shaded shape?



Each small square is 1 cm²

cm²

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59.

60.

30 questions locked, up to question 60.

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PREVIEW

That’s the end of the preview

You’ve seen the first 30 of the 60 questions in Maths Year 8 — Practice Exam 2. The full paper is worth 60 marks.

STILL TO COME	QUESTIONS	MARKS
Numeracy — calculator	30	30

The full paper comes with

- Every question, printed exactly like the ones in this preview
- The complete answer key, with the working behind every mark
- A topic report after marking, showing what to practice next

Get the full paper at

prepnest.com.au/practice/exams/math-year_8-2

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