EXAM PAPER

Maths Year 7 — Practice Exam 1

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. Which of these is the same as 5 × 5 × 5 × 5?

A. 5 × 4

B. 4^5

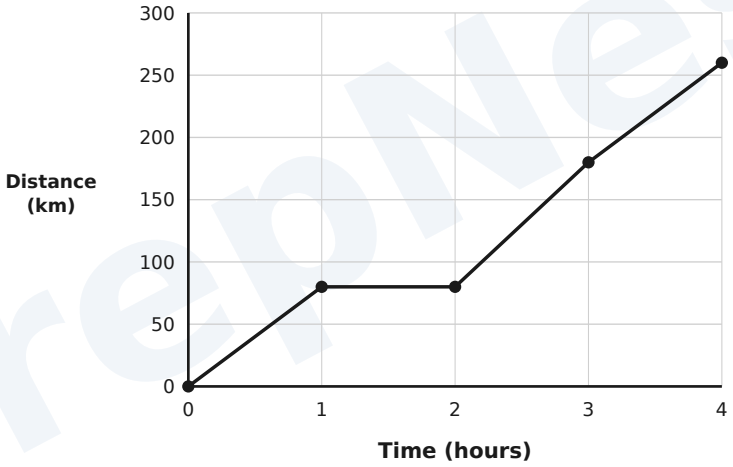
C. 20

D. 5^4

2. There are 40 students in Year 7.
3/5 of them walk to school.
How many students walk to school?

_____ students

3. The graph shows a car trip.
During which hour did the car stop?



A. 0 to 1 hours

B. 1 to 2 hours

C. 2 to 3 hours

D. 3 to 4 hours

4. The probability of an event is 0.4. Which best describes the event?

A. less likely than not to happen

B. certain to happen

C. impossible

D. more likely than not to happen

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5. Five sunflowers were measured.
Their heights were 12 cm, 19 cm, 8 cm, 15 cm and 21 cm.
What is the range of the heights?

A. 13 cm

B. 9 cm

C. 15 cm

D. 29 cm

6. What is 15% of 80?

7. What is the value of $\sqrt{144} - \sqrt{49}$?

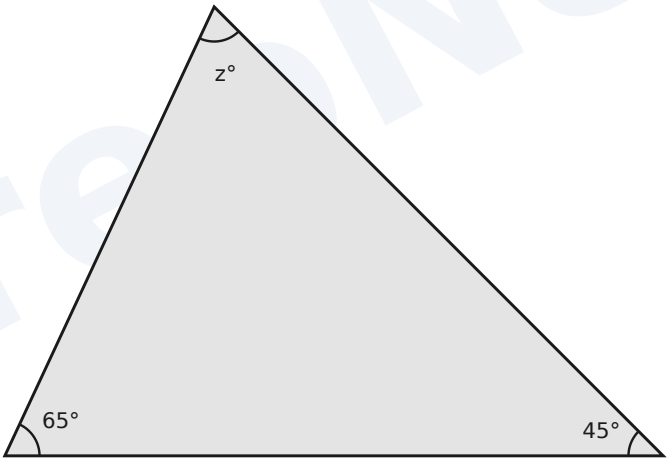
A. 5

B. 7

C. 12

D. 95

8. What is the value of z?



A. 60

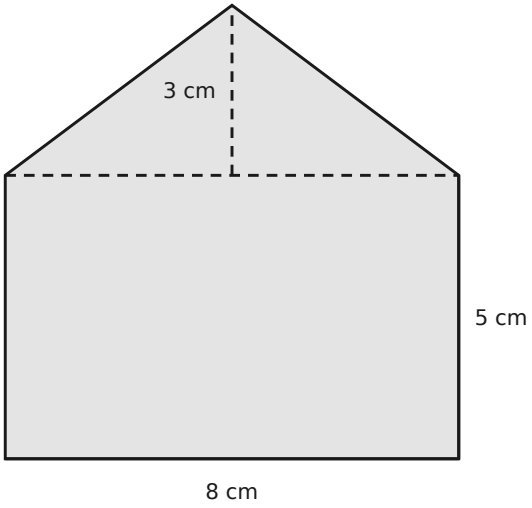
B. 70

C. 80

D. 110

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9. The shape is a rectangle with a triangle on top.
What is the area of the whole shape, in square centimetres?



not to scale

10. Which decimal is equal to 3.5%?

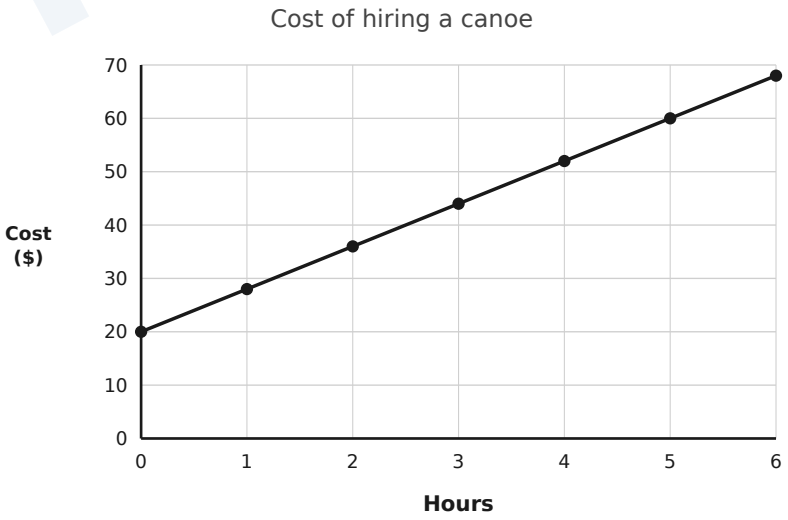
A. 0.0035

B. 0.035

C. 0.35

D. 3.5

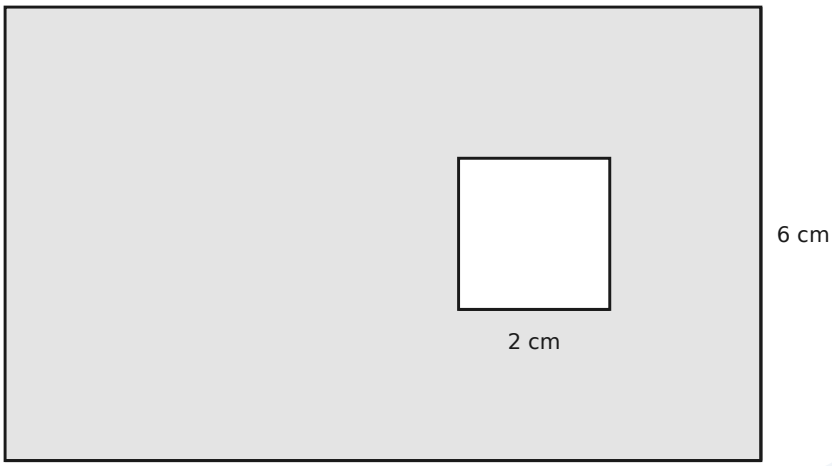
11. The graph shows the cost of hiring a canoe.
How much does it cost to hire a canoe for 5 hours?



$

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12. A 2 cm square hole is cut from a rectangular card.
What is the area of the card that is left, in square centimetres?



not to scale

13. What is the mode of the ages?

Ages of people on a bus

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

Key: 2 | 3 means 23

A. 3

B. 15

C. 20

D. 23

14. Which of these shows 72 as a product of prime factors?

A. 8×9

B. $2^3 \times 3^2$

C. $2^2 \times 3^3$

D. 2×36

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15. Which pack gives the lowest price for each bar?

Muesli bars

Pack	Price
3 bars	$2.40
5 bars	$3.75
10 bars	$7.00

A. the 10-bar pack

B. the 3-bar pack

C. the 5-bar pack

D. they all cost the same per bar

16. A school wants to know how much its students enjoy sport. Which sample is most likely to be biased?

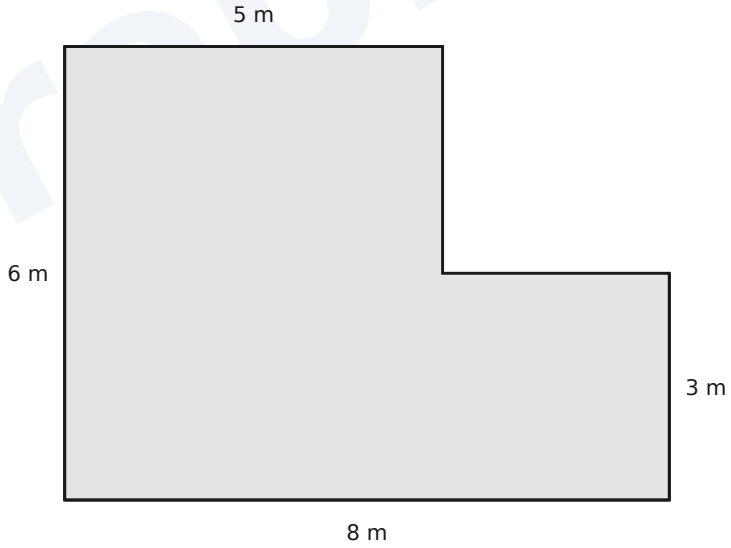
A. 30 students chosen at random

B. only the students in the school football team

C. every tenth student on the school roll

D. all the students in one randomly chosen class

17. The diagram shows the floor of a room.
What is the area of the floor?



m²

18. What is 3/4 − 1/3?

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19. Solve x/4 + 3 = 8.

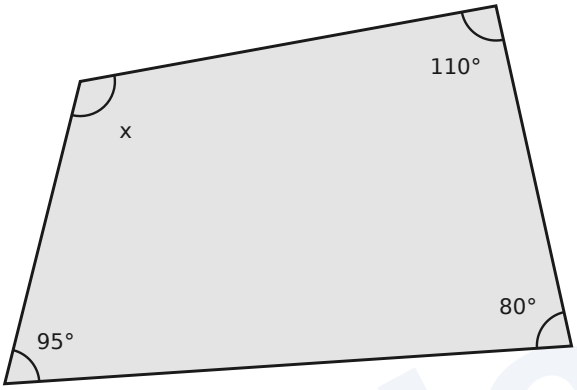
A. 1.25

B. 5

C. 20

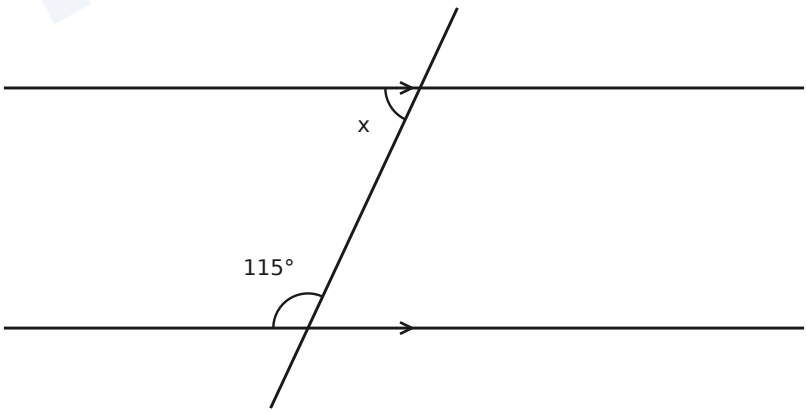
D. 44

20. What is the value of x in this quadrilateral, in degrees?



not to scale

21. The two horizontal lines are parallel. What is the value of x?



A. 65°

B. 75°

C. 115°

D. 245°

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22. What is the value of $3m^2$ when $m = 4$?

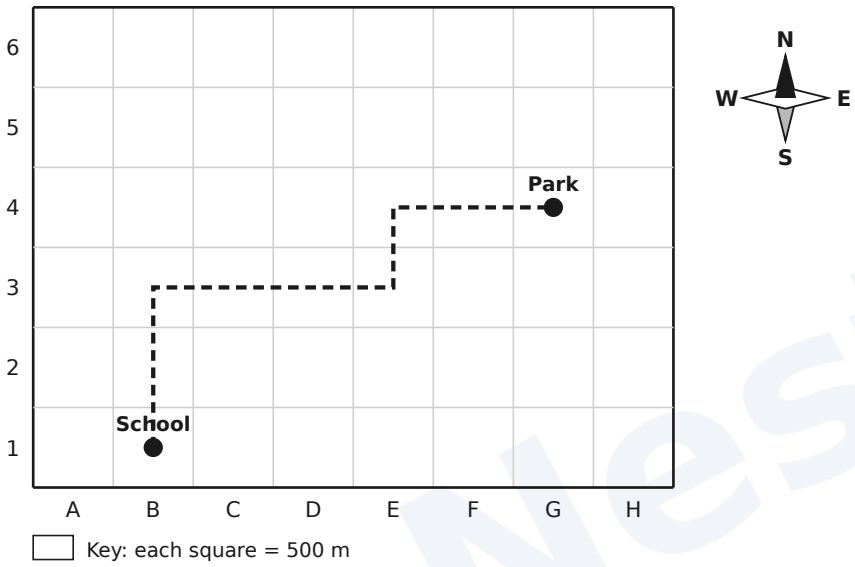
A. 12

B. 24

C. 48

D. 144

23. Leah walks from the school to the park along the path shown.
How far does she walk?



A. 4 km

B. 8 km

C. 40 km

D. 2.5 km

24. The perimeter of a square with side length s is 4s. A square has a perimeter of 3.6 m.
What is its side length, in centimetres?

25. Which is the best estimate of 0.52×398?

A. 2

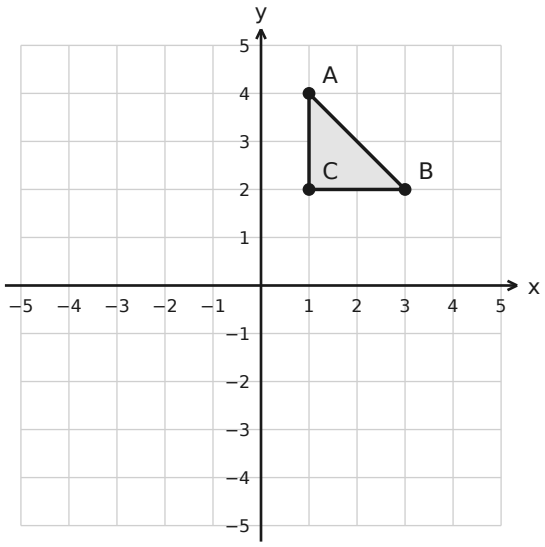
B. 20

C. 200

D. 2000

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26. Triangle ABC is reflected in the x-axis.
What are the coordinates of the image of B?



A. (−3, 2)

B. (−3, −2)

C. (2, 3)

D. (3, −2)

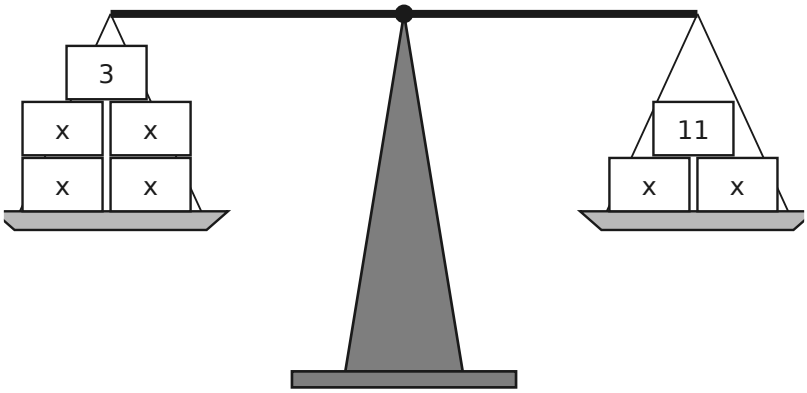
27. A spinner was spun 40 times.
The table shows the results.
Based on these results, how many times would you expect blue in 200 spins?

Colour	Frequency
Red	14
Blue	22
Green	4

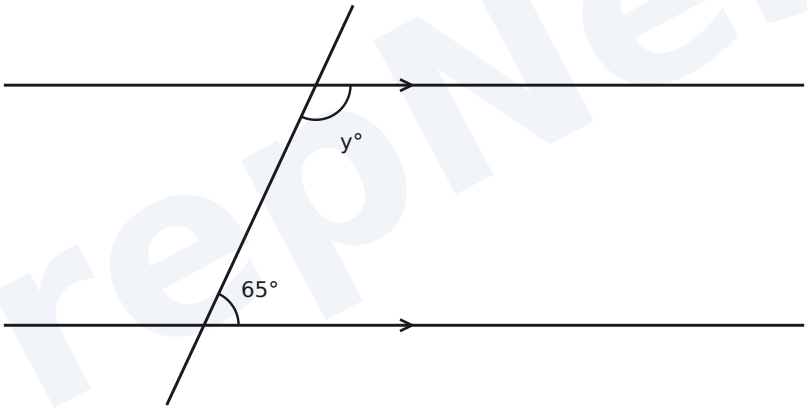
28. A bag holds only red and blue marbles. The probability of taking a red marble is 3/8, and there are 15 blue marbles.
How many red marbles are in the bag?

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29. The scales balance. Every bag marked x holds the same number of marbles, and each block shows how many marbles it holds.
How many marbles are in each bag?



30. The two horizontal lines are parallel.
What is the value of y?



A. 25

B. 65

C. 115

D. 130

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60.

30 questions locked, up to question 60.

PREVIEW

That’s the end of the preview

You’ve seen the first 30 of the 60 questions in Maths Year 7 — Practice Exam 1. 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_7-1

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