

PRACTISE • CHECK • IMPROVE

Year 7 Mathematics

Mock Paper A

40 questions • 40 practice marks

Name: _____

Class: _____ Date: _____

How to use this paper

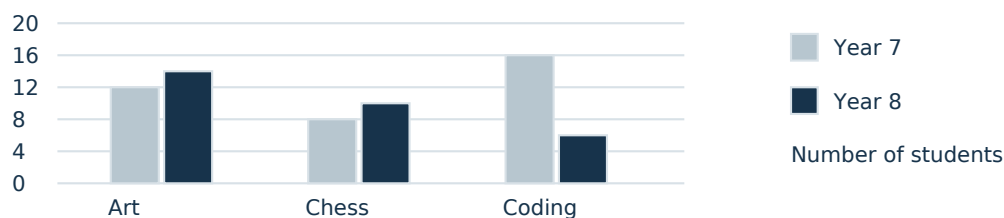
1. Write your answers on the two answer-sheet pages at the back. These can be detached before you start.
2. For multiple-choice questions, write one letter: A, B, C or D. For other questions, write a number, expression or short answer, with units where needed.
3. Use the question pages or extra paper for working. Diagrams are not to scale unless a measurement scale is provided.
4. Suggested practice time: 50 minutes. Your teacher will confirm the time and whether calculators are allowed. This is a classroom practice suggestion, not an official SMART rule.
5. If you get stuck, move on and return later. Check your answers when you finish.

This original mock practises a similar range of skills to the supplied Year 7 assessment. It is not endorsed by the Ministry of Education. A score out of 40 is for classroom feedback only.

- 01** A right triangular prism has two triangular ends. What are its other three faces?
A Pentagons
B Circles
C Rectangles
D Triangles

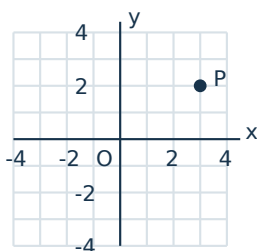
- 02** Which number is greatest?
A 713 620
B 731 620
C 713 260
D 731 260

- 03** The graph shows choices for two school clubs. How many students chose art altogether?



- A 12
B 14
C 24
D 26

- 04** Point P is at (3, 2). It is reflected in the vertical mirror line $x = 0$. Write the coordinates of its image.



Each square is 1 unit.

Mirror line: $x = 0$

Answer on your answer sheet.

-
- 05** A supplier packs 4 boxes, each holding 1 214 counters. How many counters are packed?

Answer on your answer sheet.

-
- 06** Write the missing term: 96, 48, 24, __, 6.

Answer on your answer sheet.

-
- 07** A spinner has a 73% chance of stopping on blue. What is the chance it does NOT stop on blue?

Answer on your answer sheet.

-
- 08** Which calculation has the same value as 4^3 ?

A $3 \times 3 \times 3 \times 3$

B 4×3

C $4 + 4 + 4$

D $4 \times 4 \times 4$

09 Which expression equals 6.208?

A $6 + 2 + 0.008$

B $6 + 0.02 + 0.008$

C $6 + 0.2 + 0.08$

D $6 + 0.2 + 0.008$

10 A parcel weighs 4 750 g. What is its mass in kilograms?

A 47.5 kg

B 475 kg

C 4.75 kg

D 0.475 kg

11 A mural uses 3 green tiles for every 8 white tiles. There are 56 white tiles. How many green tiles are used?

A 21

B 7

C 24

D 53

12 Find the missing number: $27 + 19 = 70 - \underline{\quad}$.

A 24

B 16

C 46

D 116

- 13** Round 674 281 to the nearest ten thousand.

A 670 000

B 674 000

C 700 000

D 680 000

- 14** A jacket is reduced by 20%. The saving is \$18. What was the original price?

A \$90

B \$72

C \$108

D \$36

- 15** Five cycle rides are 2.75, 6.5, 4.25, 8.0 and 3.5 km long. Find the range.

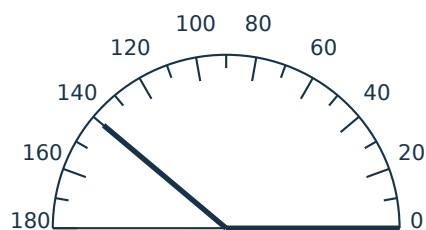
A 8 km

B 5.75 km

C 2.75 km

D 5.25 km

- 16** Read the angle between the right-pointing baseline and the sloping ray. Use the protractor scale.



Read from the right-hand 0°.

A 40°

B 50°

C 130°

D 140°

- 17** Write $\frac{23}{6}$ as a mixed number.

A $4 \frac{1}{6}$

B $3 \frac{5}{6}$

C $2 \frac{5}{6}$

D $3 \frac{2}{6}$

- 18** You face north-east. You turn three-quarters of a full turn clockwise. Which direction do you now face?

A North

B North-west

C South-west

D South-east

- 19** Simplify: $4p + 3q + 2p - 5q$.

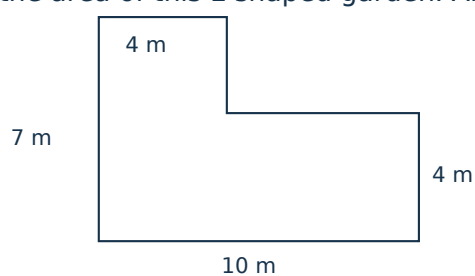
A $6p + 2q$

B $6p - 2q$

C $4p - 2q$

D $8p - 15q$

- 20** Find the area of this L-shaped garden. All lengths are in metres.



Not to scale

Answer on your answer sheet.

- 21** An account starts at -\$24. A deposit of \$45 is made, then \$38 is withdrawn. What is the new balance?
- A \$59
B -\$31
C -\$17
D \$17

-
- 22** A school hike begins at 09:35. The first stage lasts 48 minutes. Write the time it ends, using 24-hour time.
- Answer on your answer sheet.

-
- 23** The three stages of the hike take 48 minutes, 1 hour 17 minutes and 39 minutes. Find the total time in hours and minutes.
- Answer on your answer sheet.

-
- 24** A shorter route takes $\frac{5}{6}$ of 48 minutes. How many minutes does it take?
- A 43 minutes
B 57.6 minutes
C 40 minutes
D 8 minutes
-

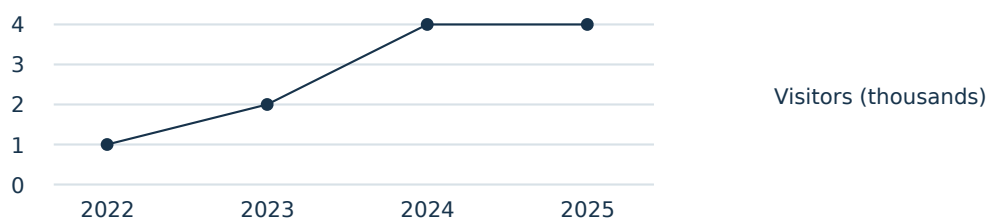
- 25** Nine seedlings are $\frac{3}{4}$ of a tray. How many seedlings fill a tray?
- A 6
B 27
C 12
D 18

- 26** A library hopes to issue 320 000 books. It has issued 247 000, then another 18 000. How many more are needed?

Answer on your answer sheet.

- 27** Downloads rose from 2.75 million to 3.12 million. How many additional downloads is this?
- A 370 000
B 3 700 000
C 37 000
D 470 000

- 28** The correct visitor totals for 2022 to 2025 are 1, 2, 3 and 4 thousand. One point on the graph is wrong. Which year is it?



- A 2025
B 2024
C 2023
D 2022

- 29** Which expression equals 4 620 000?

A $4 \times 10^6 + 6 \times 10^4 + 2 \times 10^3$

B $4 \times 10^6 + 6 \times 10^5 + 2 \times 10^3$

C $4 \times 10^5 + 6 \times 10^4 + 2 \times 10^3$

D $4 \times 10^6 + 6 \times 10^5 + 2 \times 10^4$

- 30** A bag contains red and blue counters in the ratio 3 : 5. There are 18 red counters. How many counters are there altogether?

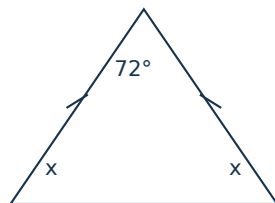
A 40

B 48

C 30

D 24

- 31** An isosceles triangle has a top angle of 72° . The two bottom angles are equal. Find one bottom angle.



Not to scale

A 108°

B 72°

C 54°

D 36°

- 32** Flip a fair coin, then roll a fair six-sided die. What is the probability of tails AND a number greater than 4?

A $\frac{1}{3}$

B $\frac{2}{3}$

C $\frac{1}{2}$

D $\frac{1}{6}$

- 33** An open-top cuboid has a base 8 cm by 5 cm and height 3 cm. Describe all five rectangles needed for its net, including their dimensions.

Answer on your answer sheet.

- 34** A storage box has inside dimensions 8 cm by 5 cm by 3 cm. What is its volume?

Answer on your answer sheet.

- 35** A formula is $T = 3a + 4b$. If $a = 6$ and $b = a - 4$, find T .

A 26

B 42

C 20

D 32

- 36** Of 160 raffle entries, 44 are juniors, 28 are seniors and 88 are adults. What is the probability a randomly selected entry is an adult?

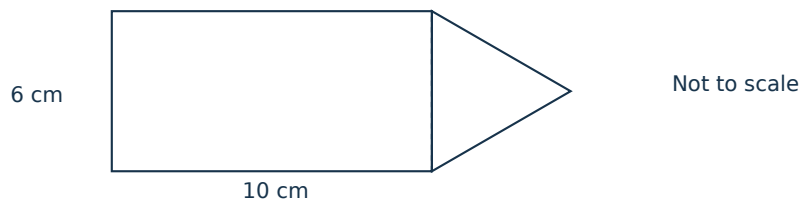
A 0.45

B 0.88

C 0.55

D 0.5

- 37** An equilateral triangle is joined along one 6 cm side to the 6 cm end of a 10 cm by 6 cm rectangle. Find the outside perimeter.



- A 32 cm B 50 cm
C 38 cm D 44 cm
-
- 38** A craft kit costs \$28 including 10 charms. Each extra charm costs \$1.50. What does a kit containing 18 charms cost?
- A \$55 B \$27
C \$42 D \$40

-
- 39** A craft kit costs \$28 including 10 charms, then \$1.50 per extra charm. A customer pays \$49. How many charms are included in total?
- A 21 B 32
C 24 D 14

-
- 40** A \$75 sports bag is discounted by 20%. What is the sale price?
- Answer on your answer sheet.

Answers 1-20

Name: _____ Class: _____

1 A / B / C / D: _____

2 A / B / C / D: _____

3 A / B / C / D: _____

4 Answer: _____

5 Answer: _____

6 Answer: _____

7 Answer: _____

8 A / B / C / D: _____

9 A / B / C / D: _____

10 A / B / C / D: _____

11 A / B / C / D: _____

12 A / B / C / D: _____

13 A / B / C / D: _____

14 A / B / C / D: _____

15 A / B / C / D: _____

16 A / B / C / D: _____

17 A / B / C / D: _____

18 A / B / C / D: _____

19 A / B / C / D: _____

20 Answer: _____

Answers 21-40

Name: _____ Class: _____

21 A / B / C / D: _____

22 Answer: _____

23 Answer: _____

24 A / B / C / D: _____

25 A / B / C / D: _____

26 Answer: _____

27 A / B / C / D: _____

28 A / B / C / D: _____

29 A / B / C / D: _____

30 A / B / C / D: _____

31 A / B / C / D: _____

32 A / B / C / D: _____

33 Answer: _____

34 Answer: _____

35 A / B / C / D: _____

36 A / B / C / D: _____

37 A / B / C / D: _____

38 A / B / C / D: _____

39 A / B / C / D: _____

40 Answer: _____