JCOL Basic Skills – Pack 8

Topics

Applied Arithmetic – Can I calculate the time taken, given the distance and speed?

1 ▶ 2002 JCHL Paper 1 – Question 1 (ii) ☐

Coordinate Geometry – Can I show that a point is on a line?

2 ▶ 2002 JCHL Paper 2 – Question 1 (ix) ☐

Algebra – Can I expand brackets to form a quadratic expression?

3 ▶ 2019 JCOL Paper 1 – Question 7 (a) ☐

Statistics – Can I calculate the median of a set of data?

4 ▶ 2019 JCOL Paper 2 – Question 7 (c) ☐

Geometry – Can I identify similar triangles?

5 ▶ 2017 JCOL Paper 2 – Question 8 (c) ☐

www.mathspoints.ie for **worked solutions** to these questions.

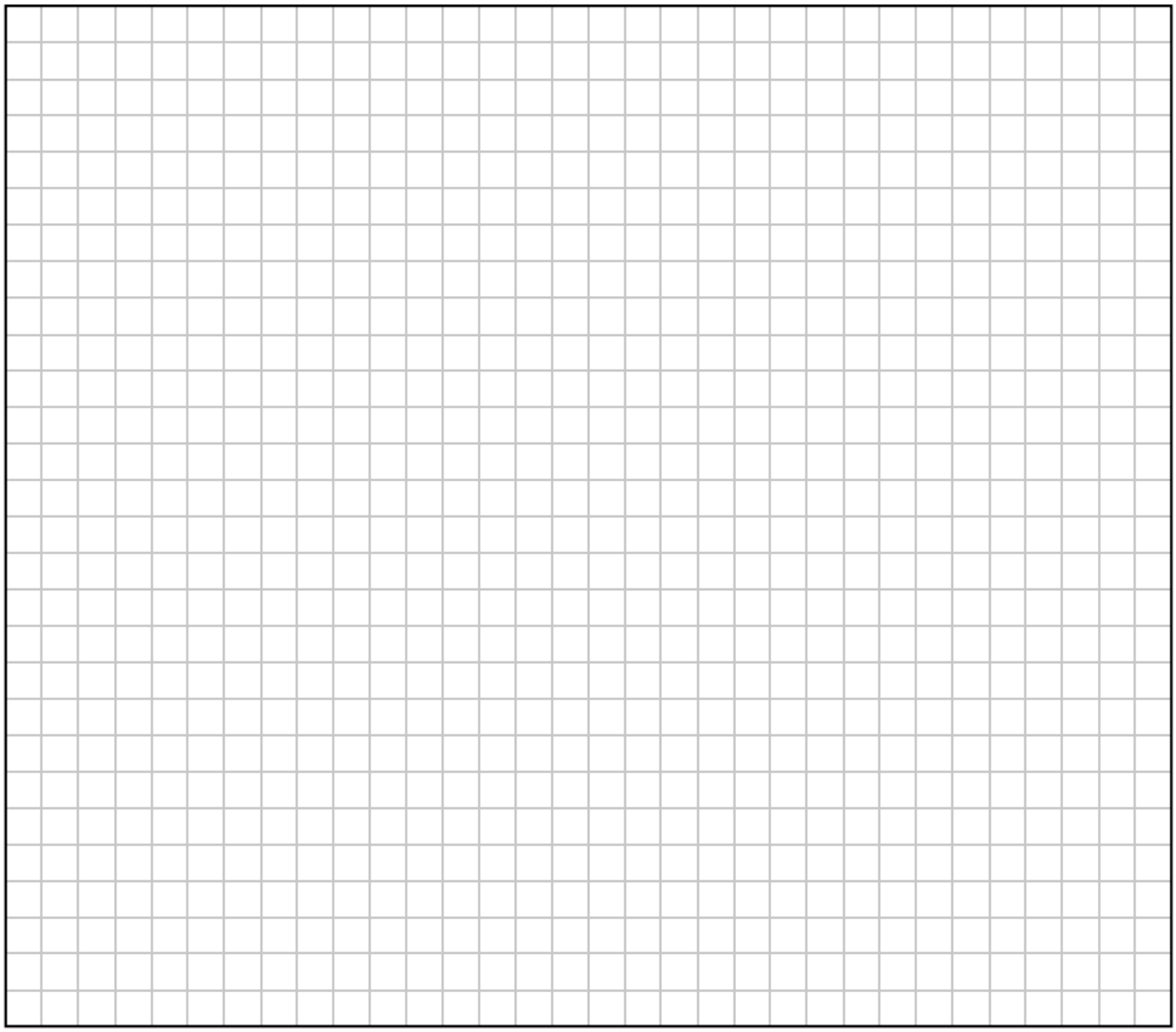
JCOL Resources by Topic

JCOL Revision – 50 Common Questions

1 ▶ 2002 JCHL Paper 1 – Question 1 (ii)

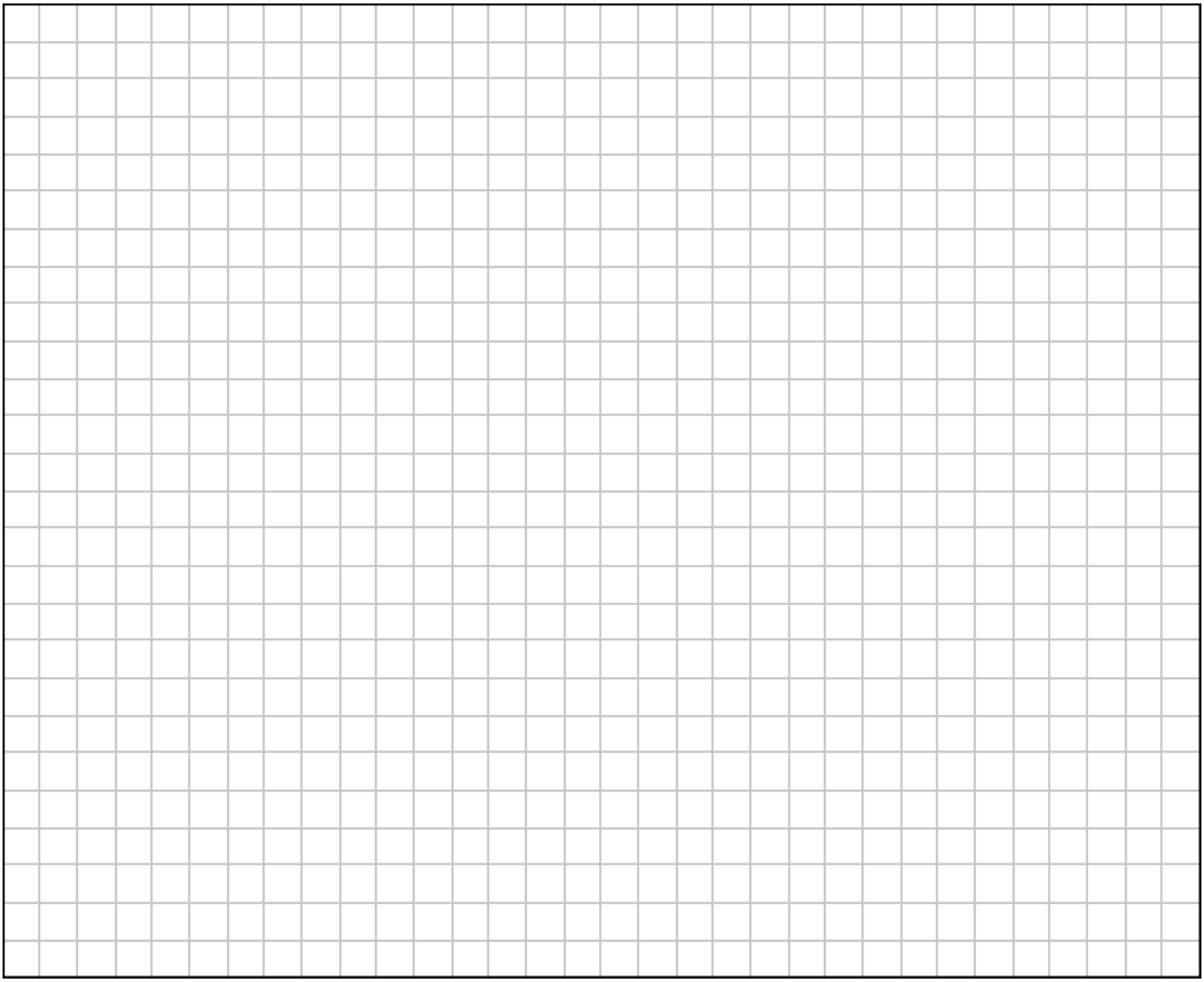
A person travelled at an average speed of 72 km/hr for 4 hours and 20 minutes.

How far did the person travel?



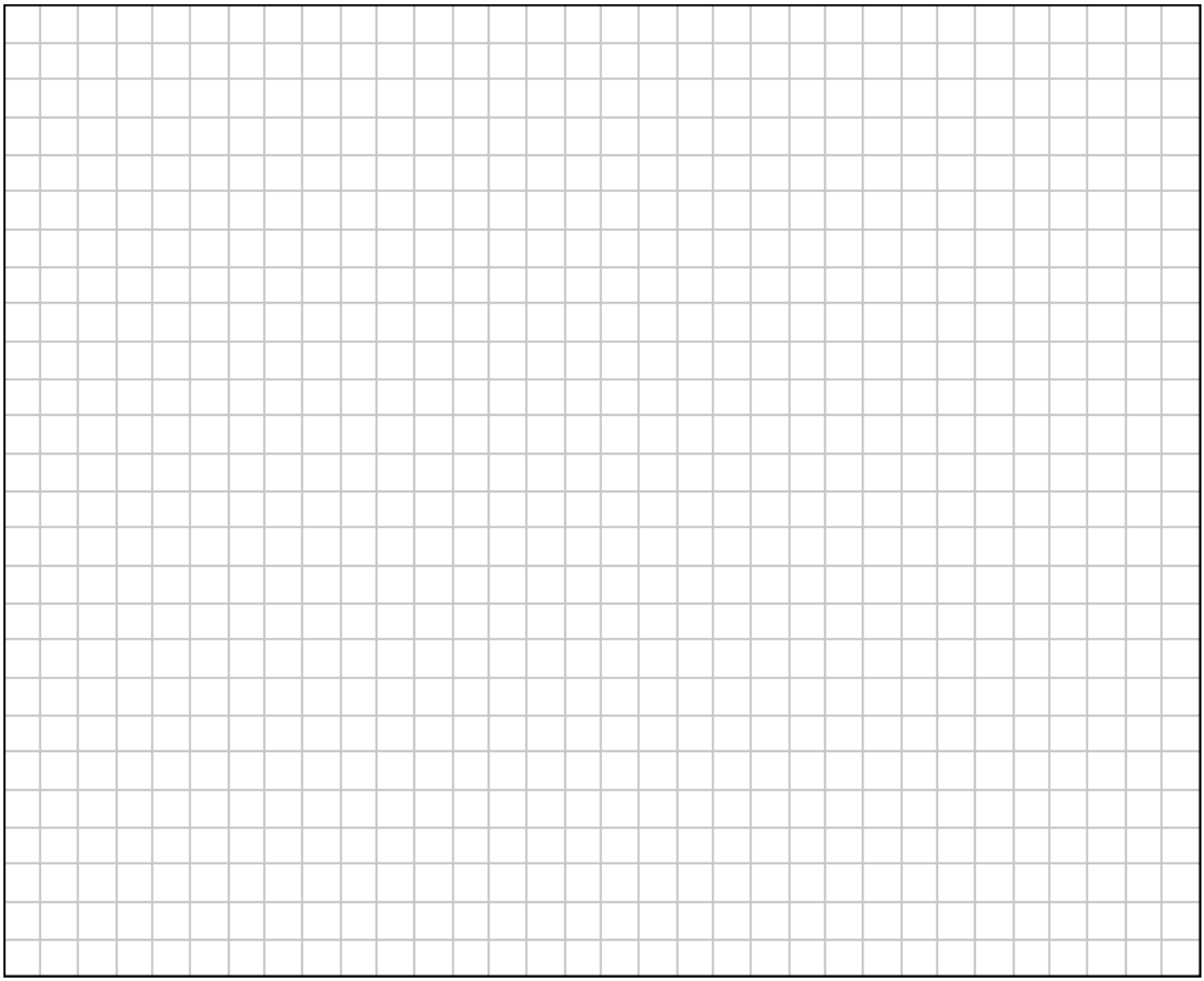
2 ▶ 2002 JCHL Paper 2 – Question 1 (ix)

Verify that the point $(1, -1)$ is on the line $3x + 2y - 1 = 0$.



3 ▶ 2019 JCOL Paper 1 – Question 7 (a)

Multiply out and simplify $(x + 3)(x - 2)$.

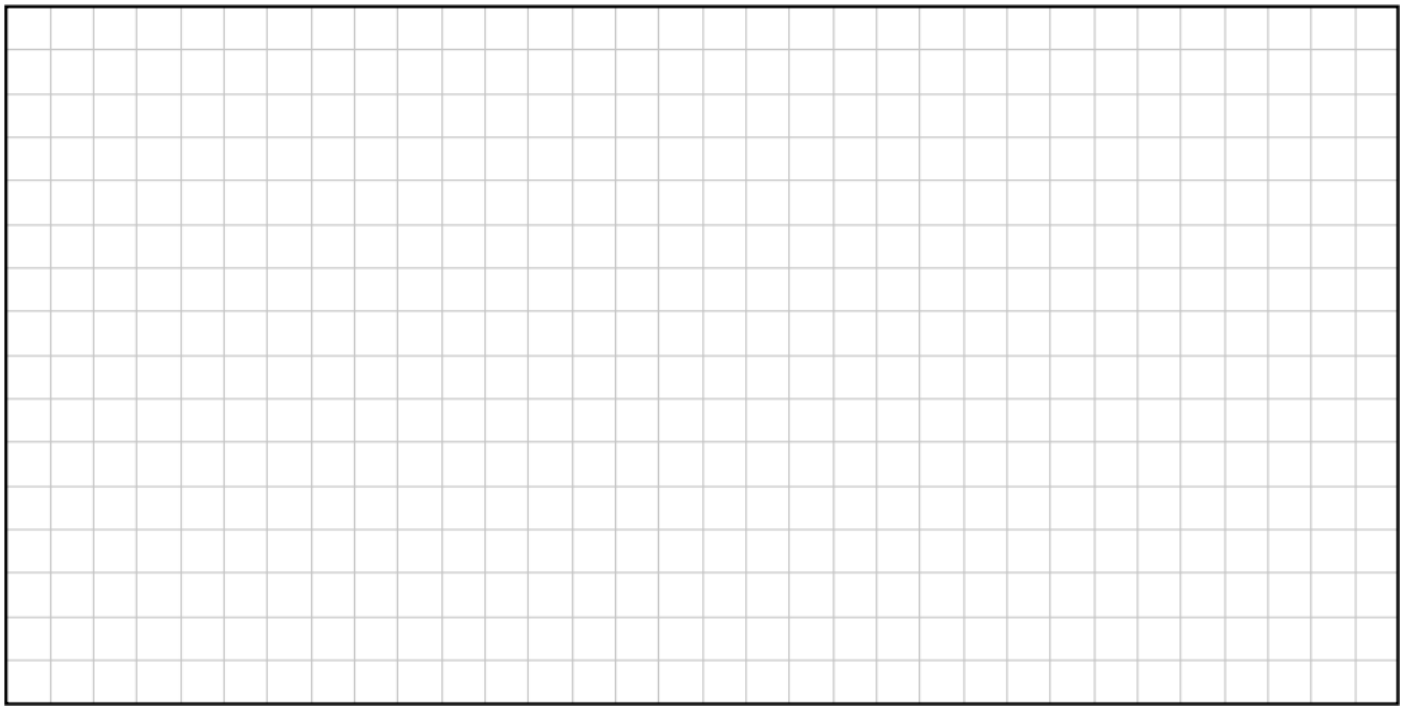


4 ▶ 2019 JCOL Paper 2 – Question 7 (c)

Filip measures the height of seven of the students in his class. Their heights, in cm, are:

166 168 168 169 172 173 177

Work out the **median** of the data, in cm.



5 ▶ 2017 JCOL Paper 2 – Question 8 (c)

The diagram below shows part of a climbing frame.

The points B and C are on the ground.

The legs $[OB]$ and $[OC]$ are joined by the horizontal bar $[PS]$.

Ava measures the angle that each of the legs makes with the ground.

She finds that they are both 55°.

OBC and OPS are **similar** triangles.

Explain what this means.