

Name _____

Date _____

Maths vocabulary — answers

40 tasks in five styles, covering every key word in Unit 1.

A · Unscramble the term — Rearrange the letters to make the term that matches the definition.

1 socroidanet

A pair of numbers fixing a position.

Example: (3, -2).

Answer: coordinates

The word is **coordinates** — A pair of numbers fixing a position.

2 irogin

The point (0, 0) where the axes cross.

Example: Everything is measured from it.

Answer: origin

The word is **origin** — The point (0, 0) where the axes cross.

3 nuqdaart

One of the four regions the axes make.

Example: Quadrant 1 is top right.

Answer: quadrant

The word is **quadrant** — One of the four regions the axes make.

4 nrgdaeit

How steep a line is; the number in front of x.

Example: 3 in $y = 3x + 2$.

Answer: gradient

The word is **gradient** — How steep a line is; the number in front of x.

5 nimpdiot

The point exactly halfway between two others.

Example: Average both coordinates.

Answer: midpoint

The word is **midpoint** — The point exactly halfway between two others.

6 eaparlll

Lines with the same gradient.

Example: They never meet.

Answer: parallel

The word is **parallel** — Lines with the same gradient.

7 olpt

Mark points on a grid.

Example: Then join them with a ruler.

Answer: plot

The word is **plot** — Mark points on a grid.

8 ecsia

What one square on an axis is worth.

Example: Check it before reading.

Answer: scale

The word is **scale** — What one square on an axis is worth.

B · Fill in the gaps — Use a word from the box to complete each sentence.

- 9** A pair of numbers fixing a position is called _____.

Word box: □

Answer: coordinates

(3, -2).

- 10** The point (0, 0) where the axes cross is the _____.

Word box: □

Answer: origin

Everything is measured from it.

- 11** Each of the four regions the axes make is a _____.

Word box: □

Answer: quadrant

Quadrant 1 is top right.

- 12** The number in front of x, showing steepness, is the _____.

Word box: □

Answer: gradient

3 in $y = 3x + 2$.

- 13** Where a line crosses the y-axis is the _____.

Word box: □

Answer: y-intercept

2 in $y = 3x + 2$.

- 14** Lines with the same gradient are _____.

Word box: □

Answer: parallel

They never meet.

- 15** What one square on an axis is worth is the _____.

Word box: □

Answer: scale

Check it before reading anything.

- 16 The point exactly halfway between two others is the _____.

Word box: □

Answer: midpoint

Average both coordinates.

C · Choose the correct ending — Pick the reason that correctly finishes each sentence.

- 17 (3, 5) and (5, 3) are different points because ...

- ☐ they use different numbers
- ☐ coordinates are written in a fixed order, x then y
- ☐ one is bigger

Answer: coordinates are written in a fixed order, x then y

3 across and 5 up is not the same as 5 across and 3 up.

- 18 A conversion graph passes through the origin because ...

- ☐ all graphs do
- ☐ zero of one unit is zero of the other
- ☐ it looks neater

Answer: zero of one unit is zero of the other

Zero miles is zero kilometres.

- 19 A taxi-fare graph does not pass through the origin because ...

- ☐ taxis are expensive
- ☐ there is a fixed charge before you travel
- ☐ the graph is curved

Answer: there is a fixed charge before you travel

You pay it even for zero kilometres.

- 20 A flat section on a distance–time graph means ...

- ☐ moving slowly
- ☐ not moving at all
- ☐ moving backwards

Answer: not moving at all

Time passes but the distance does not change.

- 21 Two lines with the same gradient never meet because ...

- ☐ they are short
- ☐ they rise at exactly the same rate
- ☐ they are vertical

Answer: they rise at exactly the same rate

The gap between them stays the same for ever.

- 22 You plot a third point when drawing a line because ...

- ☐ two is not enough to fix a line
- ☐ it checks the first two
- ☐ the graph looks better

Answer: it checks the first two

Two points do fix a line — the third catches an error.

D · Match the definition — Type the term that matches each definition.

- 23** Which term means: *A pair of numbers fixing a position.*
Answer: coordinates
coordinates — $(3, -2)$.
- 24** Which term means: *The first number: how far across.*
Answer: x-coordinate
x-coordinate — 3 in $(3, -2)$.
- 25** Which term means: *The second number: how far up or down.*
Answer: y-coordinate
y-coordinate — -2 in $(3, -2)$.
- 26** Which term means: *The point $(0, 0)$ where the axes cross.*
Answer: origin
origin — Everything is measured from it.
- 27** Which term means: *One of the four regions the axes make.*
Answer: quadrant
quadrant — Quadrant 1 is top right.
- 28** Which term means: *The point exactly halfway between two others.*
Answer: midpoint
midpoint — Average both coordinates.
- 29** Which term means: *How steep a line is; the number in front of x .*
Answer: gradient
gradient — 3 in $y = 3x + 2$.
- 30** Which term means: *Where a line crosses the y -axis.*
Answer: y-intercept
y-intercept — 2 in $y = 3x + 2$.
- 31** Which term means: *A graph for changing units.*
Answer: conversion graph
conversion graph — Miles to kilometres.
- 32** Which term means: *Distance travelled against time.*
Answer: distance-time graph
distance-time graph — Its gradient is speed.
- 33** Which term means: *How much one quantity changes per unit of another.*
Answer: rate
rate — 80 km per hour.
- 34** Which term means: *What one square on an axis is worth.*
Answer: scale
scale — Check it before reading.

E · Reading graph questions — What the instruction words are asking for.

35 A question says “plot the graph of $y = 2x + 1$ ”. What must you do first?

- ☐ Draw the line
- ☐ Make a table of values
- ☐ Guess two points
- ☐ Label the axes only

Answer: Make a table of values

Work out the y for several x values before plotting anything.

36 A question says “state the coordinates of P ”. How should you write the answer?

- ☐ 3 and 2
- ☐ (3, 2)
- ☐ $x = 3$
- ☐ 3, 2 up

Answer: (3, 2)

In brackets, x first, separated by a comma.

37 A question says “what does the gradient represent?” on a distance–time graph. What is the answer?

- ☐ The distance
- ☐ The time
- ☐ The speed
- ☐ The stop

Answer: The speed

Distance divided by time.

38 A question says “use the graph to estimate”. What is expected?

- ☐ An exact answer
- ☐ A value read from the graph, which may not be exact
- ☐ A calculation only
- ☐ A guess

Answer: A value read from the graph, which may not be exact

Show the lines you drew on the graph to read it.

39 What does “intercept” mean?

- ☐ The steepness
- ☐ Where the line crosses an axis
- ☐ The midpoint
- ☐ The length

Answer: Where the line crosses an axis

Usually the y -axis unless the question says otherwise.

40 A question asks for a journey to be “described”. What should you mention?

- ☐ The colour of the line
- ☐ Each section: speed, stops and returns
- ☐ The title
- ☐ The scale only

Answer: Each section: speed, stops and returns

Read the story the graph tells, section by section.