

Name _____

Date _____

Maths vocabulary — worksheet

49 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 (x, y) fixing a position.

Example: (3, -2).

2 irogin

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

Example: The centre of the grid.

3 nuqdaart

One of the four regions the axes divide the plane into.

Example: (-2, 5) is in quadrant 2.

4 nrtnalstaoi

A slide: every point moves the same way.

Example: By (4, -1).

5 oevtcr

The pair (across, up) describing a translation.

Example: (-3, 5).

6 oerlfceitn

A flip in a mirror line.

Example: In the y-axis.

7 ooratitn

A turn about a fixed point.

Example: 90° anticlockwise about (1, 1).

8 tocgurne

Same shape and same size.

Example: After any slide, flip or turn.

9 risimal

Same shape, possibly different size.

Example: After an enlargement.

10 tnealgrmene

A change of size by a scale factor.

Example: Scale factor 3.

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

- 11** A slide in which every point moves the same distance in the same direction is a ____.

Word box:

- 12** A flip in a mirror line is a ____.

Word box:

- 13** A turn about a fixed point is a ____.

Word box:

- 14** A change of size by a scale factor is an ____.

Word box:

- 15** Two shapes that are the same shape and the same size are ____.

Word box:

- 16** Two shapes that are the same shape but a different size are ____.

Word box:

- 17** A translation is described by a ____.

Word box:

- 18** The number every length is multiplied by in an enlargement is the ____.

Word box:

- 19** The point (0, 0) is called the ____.

Word box:

- 20** A point that does not move during a transformation is an ____.

Word box:

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

- 21** A translation leaves a shape congruent because ...

- ☐ it is a small movement
- ☐ nothing is stretched, turned over or resized
- ☐ the vector is short

- 22** An enlargement gives a similar, not a congruent, image because ...
- ☐ the angles change
 - ☐ the lengths change but the angles do not
 - ☐ the shape is turned over
- 23** A rotation must state its centre because ...
- ☐ it looks complete
 - ☐ the same angle about a different centre lands the shape somewhere else
 - ☐ the centre is always the origin
- 24** Areas are multiplied by k^2 in an enlargement because ...
- ☐ areas are large
 - ☐ an area is a length multiplied by a length
 - ☐ it is a rule to memorise
- 25** A point on the mirror line does not move because ...
- ☐ it is special
 - ☐ its distance from the mirror is zero
 - ☐ the mirror is invisible
- 26** You can find the distance between (2, 5) and (9, 5) without a grid because ...
- ☐ the numbers are small
 - ☐ they share a y-coordinate, so only the x changes
 - ☐ 5 is a nice number
- 27** A map scale of 1 : 50 000 needs no units because ...
- ☐ units are optional
 - ☐ both sides are measured in the same units
 - ☐ maps are always in centimetres

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

- 28** Which term means: *A pair of numbers (x, y) fixing a position.*
-
- 29** Which term means: *The point (0, 0), where the axes cross.*
-
- 30** Which term means: *One of the four regions the axes divide the plane into.*
-
- 31** Which term means: *The shape you start with.*
-
- 32** Which term means: *The shape after the transformation.*
-
- 33** Which term means: *A slide: every point moves the same way.*
-
- 34** Which term means: *The pair (across, up) describing a translation.*
-
- 35** Which term means: *A flip in a mirror line.*
-
- 36** Which term means: *The line a shape is reflected in.*
-

- 37 Which term means: *A turn about a fixed point.*
-
- 38 Which term means: *The point everything turns around.*
-
- 39 Which term means: *Same shape and same size.*
-
- 40 Which term means: *Same shape, possibly different size.*
-
- 41 Which term means: *A change of size by a scale factor.*
-
- 42 Which term means: *The number every length is multiplied by.*
-
- 43 Which term means: *A point that does not move.*
-

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

- 44 A question says “describe fully the single transformation”. What must your answer contain?
- ☐ The name only
 - ☐ The name and every detail it needs — vector, mirror line, or angle, direction and centre
 - ☐ A drawing
 - ☐ The coordinates
- 45 A question says “map ABC onto A'B'C'”. What does *map* mean here?
- ☐ Draw a map
 - ☐ Transform one shape onto the other
 - ☐ Measure it
 - ☐ Label it
- 46 A question uses the notation A'. What does the dash mean?
- ☐ A different letter
 - ☐ The image of A after the transformation
 - ☐ A mistake
 - ☐ A measurement
- 47 A question says “state the scale factor”. What kind of answer is wanted?
- ☐ A pair of coordinates
 - ☐ A single number
 - ☐ A vector
 - ☐ An angle
- 48 A question says “without the aid of a grid”. What is it testing?
- ☐ Your drawing
 - ☐ That you can work from the coordinates alone
 - ☐ Your memory
 - ☐ Nothing

- 49** A question says “1 cm represents 5 m”. Which way do you multiply?
- ☐ Always multiply
 - ☐ Drawing to real life: multiply. Real life to drawing: divide.
 - ☐ Always divide
 - ☐ It does not matter