

Master 7.14

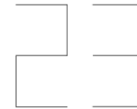
Step-by-Step 1

Lesson 1, Question 3

Step 1 Choose any 2-digit number. _____

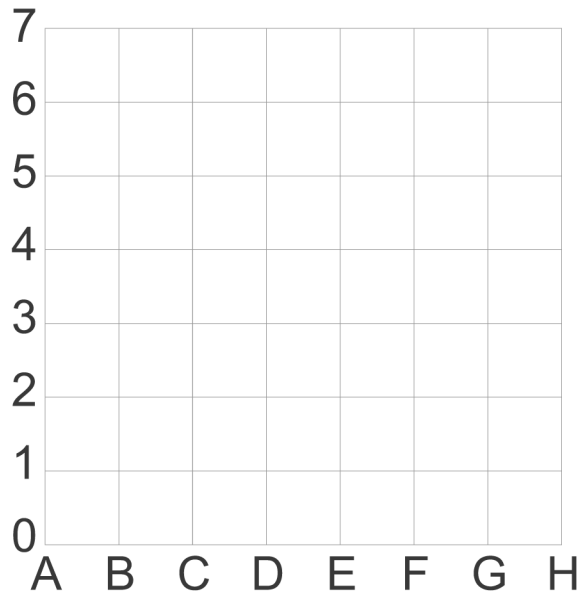
Write your number using only line segments.

For example, write the number 23 like this:



Step 2 Draw the number from *Step 1* on the grid below.

Make certain the line segments lie on grid lines.



Step 3 Record the coordinates of the corners of the digits.

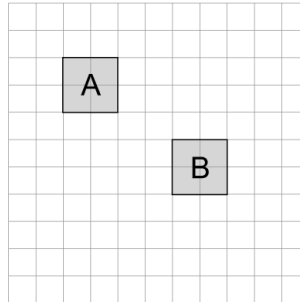
Write instructions to draw your number.

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Step-by-Step 2

Lesson 2, Question 4

Use tracing paper.



Step 1 Which translation would move Figure A to coincide with Figure B?

Step 2 Think of a rotation.

Mark a dot on the picture above to show the turn centre that would turn Figure A to coincide with Figure B.

What fraction of a turn would Figure A move?

Step 3 Above, draw Figure C congruent to Figures A and B.

Describe a transformation that would move Figure A to coincide with Figure C.

Describe a transformation that would move Figure C to coincide with Figure B.

Step-by-Step 3

Lesson 3, Question 4

You will need a 5 by 5 geoboard, geobands, and dot paper.

Step 1 Divide the geoboard into 2 congruent parts.
How many different ways can you do this? _____
Record each way on dot paper.

Step 2 Use your results from *Step 1*.
Divide the geoboard into 4 congruent parts.
How many different ways can you do this?
Record each way on dot paper.

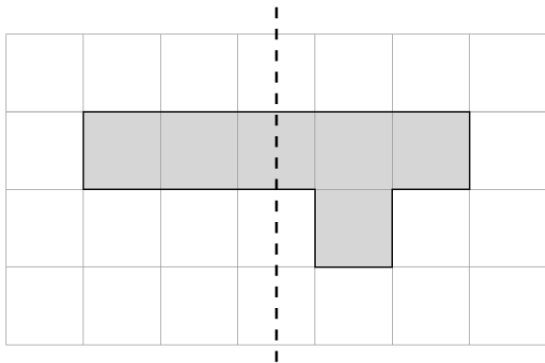
Step 3 Use your results from *Step 2*.
Divide the geoboard into 8 congruent parts.
How many different ways can you do this? _____
Record each way on dot paper.

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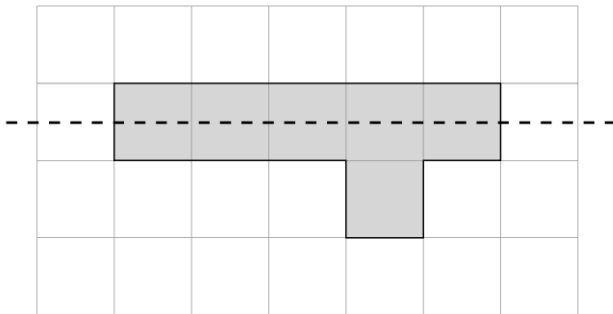
Step-by-Step 4

Lesson 4, Question 5

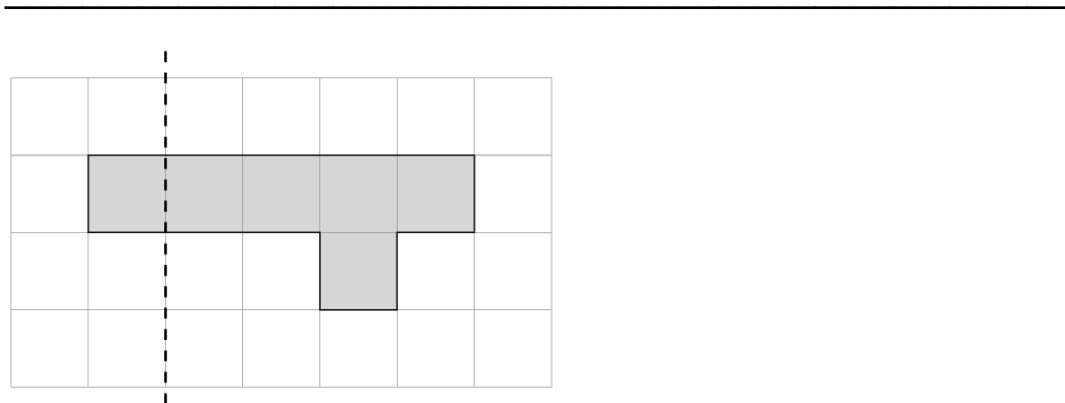
Step 1 Add a square to this figure so the broken line is a line of symmetry.



Step 2 Add a square to this figure so the broken line is a line of symmetry.



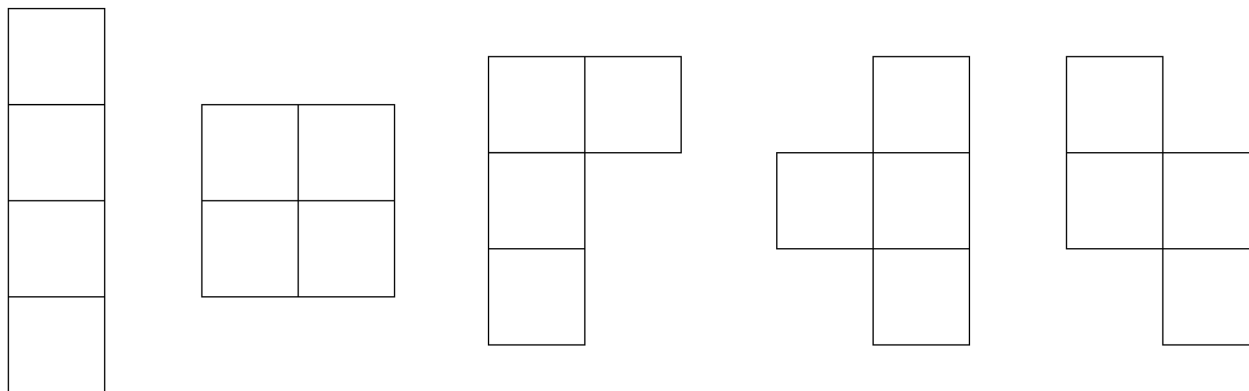
Step 3 Is it possible to add a square to this figure so the broken line is a line of symmetry? How do you know?



Step-by-Step 6**Lesson 6, Question 3**

A tetromino is made with 4 congruent squares.

There are 5 different tetrominoes.



You will need 2-cm grid paper and scissors.

- Step 1** Choose one of the tetrominoes.
Draw 8 copies of the tetromino on grid paper.
Use scissors. Cut out the copies.
Try to arrange the tetrominoes in a tiling pattern.

- Step 2** Repeat *Step 1* four times.
Each time use a different tetromino.