

Unit 2 Lesson 6: Similarity

1 Equivalent Expressions (Warm up)

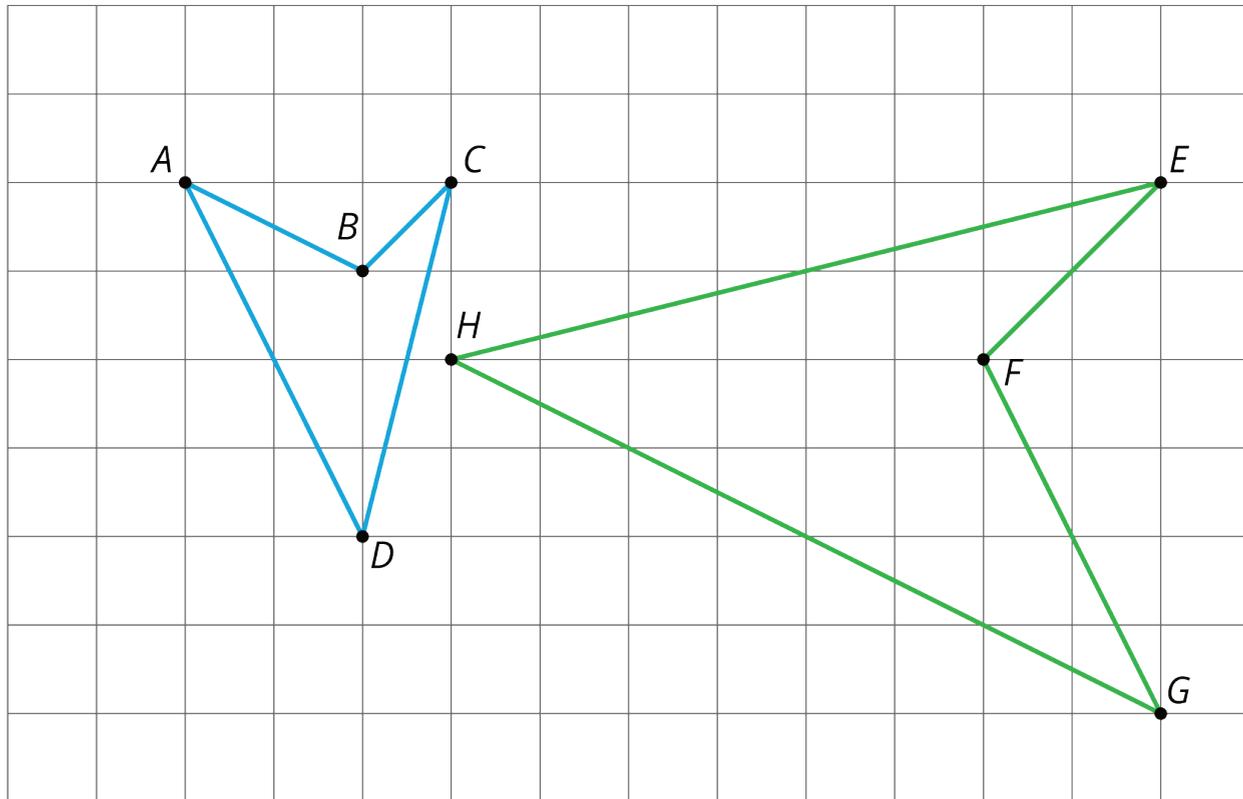
Student Task Statement

Use what you know about operations and their properties to write three expressions equivalent to the expression shown.

$$10(2 + 3) - 8 \cdot 3$$

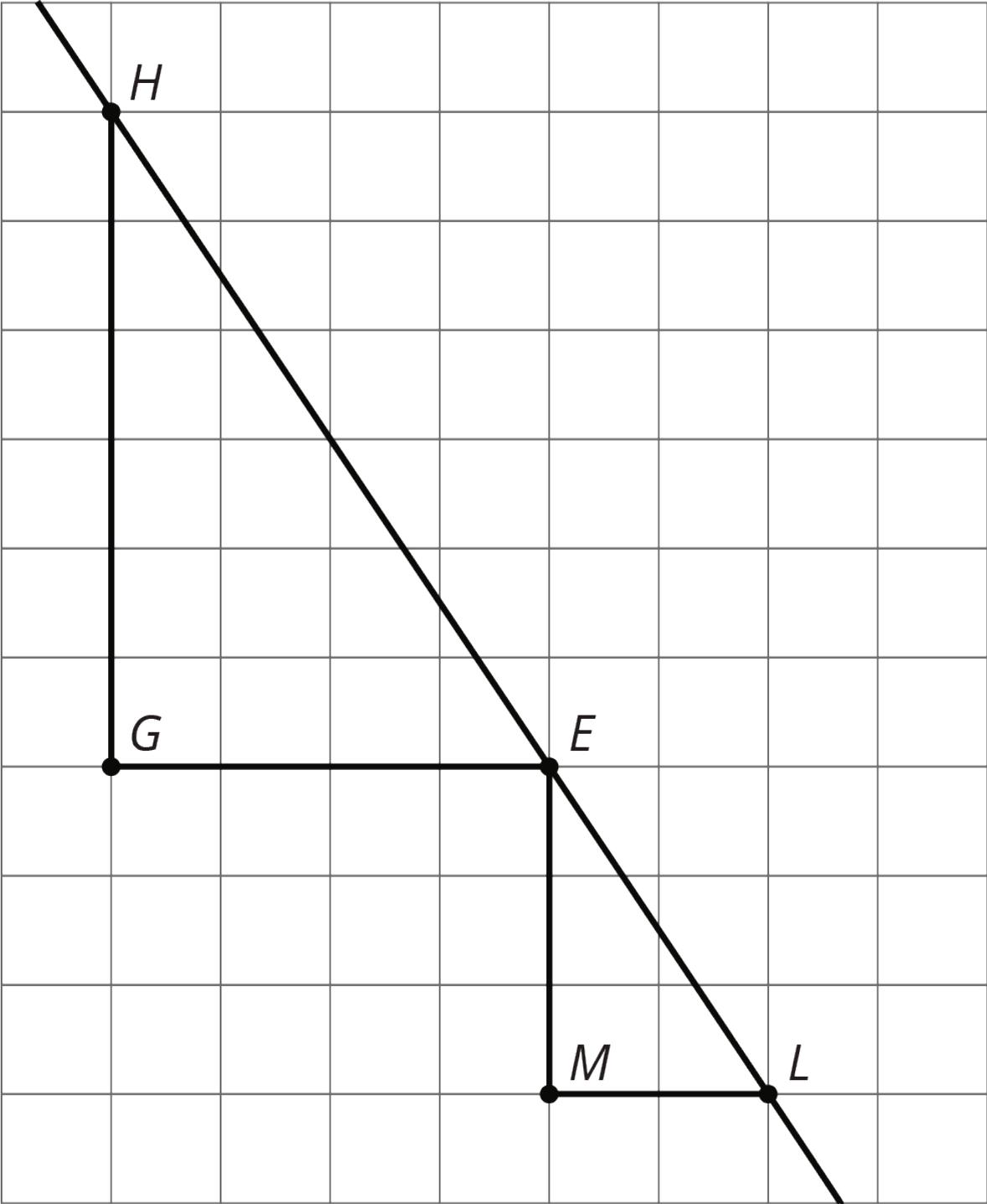
2 Similarity Transformations (Part 1)

Images for Launch

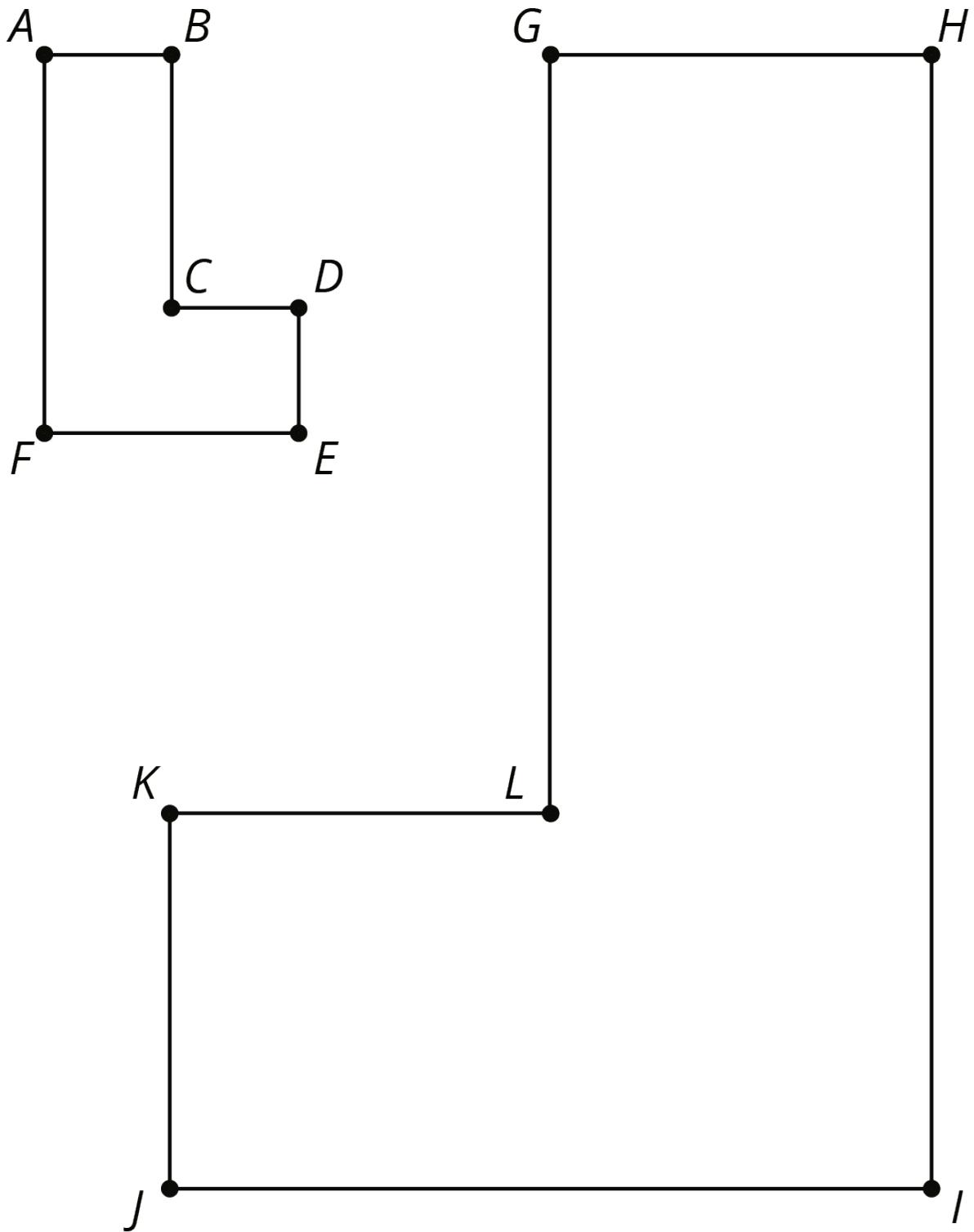


Student Task Statement

1. Triangle EGH and triangle LME are **similar**. Find a sequence of translations, rotations, reflections, and dilations that shows this.



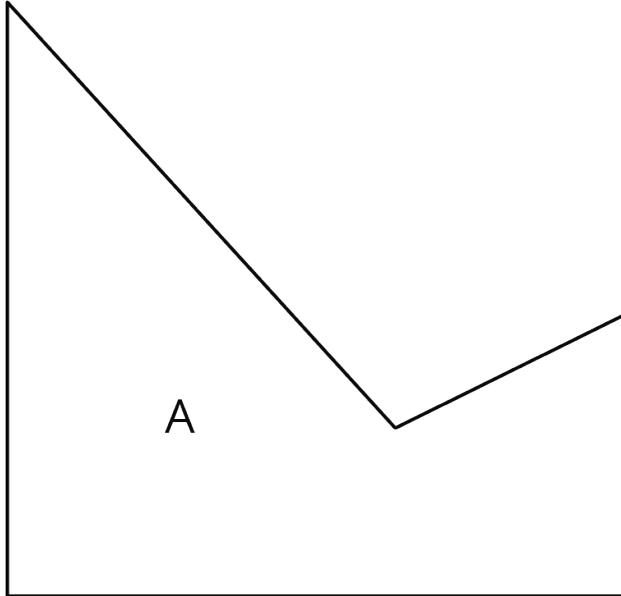
2. Hexagon $ABCDEF$ and hexagon $HGLKJI$ are similar. Find a sequence of translations, rotations, reflections, and dilations that shows this.



3 Similarity Transformations (Part 2)

Student Task Statement

Sketch figures similar to Figure A that use only the transformations listed to show similarity.



1. A translation and a reflection. Label your sketch Figure B.
Pause here so your teacher can review your work.
2. A reflection and a dilation with scale factor greater than 1. Label your sketch Figure C.
3. A rotation and a reflection. Label your sketch Figure D.
4. A dilation with scale factor less than 1 and a translation. Label your sketch Figure E.

4 Methods for Translations and Dilations (Optional)

Student Task Statement

Your teacher will give you a set of five cards and your partner a different set of five cards. Using only the cards you were given, find at least one way to show that triangle ABC and triangle DEF are similar. Compare your method with your partner's method. What is the same about your methods? What is different?

