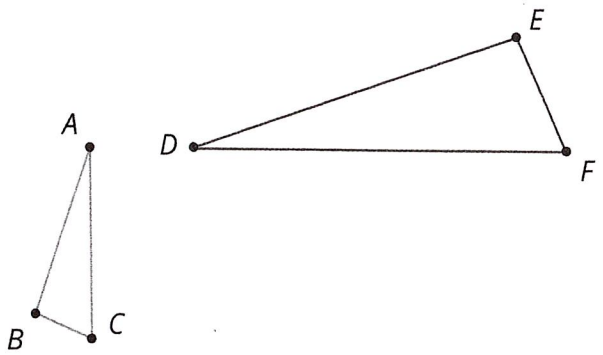
Unit 2

Lesson 6 Summary

Let's show that triangle ABC is similar to triangle DEF:

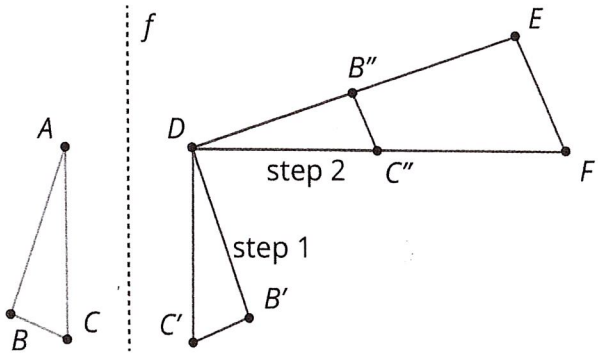


Two figures are **similar** if one figure can be transformed into the other by a sequence of translations, rotations, reflections, and dilations. There are many correct sequences of transformations, but we only need to describe one to show that two figures are similar.

One way to get from ABC to DEF follows these steps:

* Similar figures will always have a dilation.

- step 1: reflect across line f
- step 2: rotate 90° counterclockwise around D
- step 3: dilate with center D and scale factor 2



*You could also move △DEF to △ABC to prove they are similar

Another way would be to dilate triangle ABC by a scale factor of 2 with center of dilation A, then translate A to D, then reflect over a vertical line through D, and finally rotate it so it matches up with triangle DEF. What steps would you choose to show the two triangles are similar?

Lesson 6 Glossary Terms

- similar