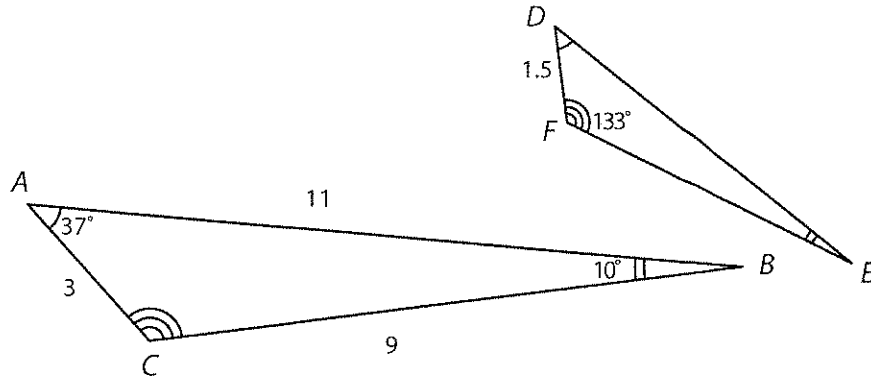


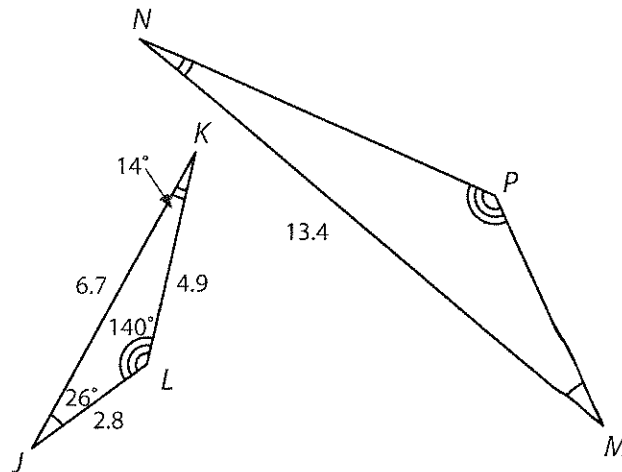
Practice 1.6.1: Defining Similarity

Find all the angle measures and side lengths for each triangle of the given similar pairs.

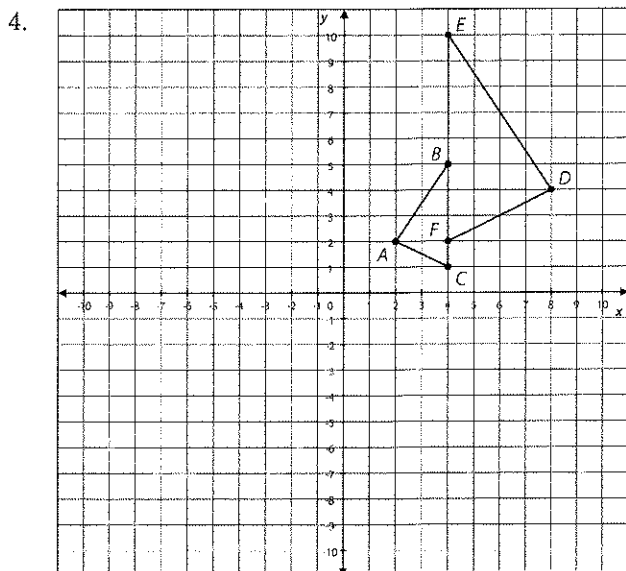
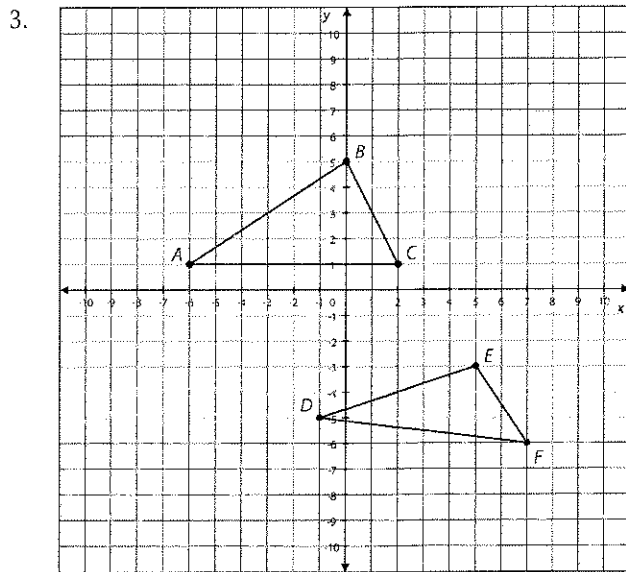
1. $\triangle ABC \sim \triangle DEF$



2. $\triangle JKL \sim \triangle MNP$



Determine if the two given triangles are similar. Use the definition of similarity in terms of similarity transformations to explain your answer.



Problem-Based Task 1.6.1: Video Game Transformations

The creators of a new video game are in the early design stages and are using the right triangle ABC on a coordinate plane to represent the movement of the character in the actual game setting. The coordinates of the points are $A(-6, -9)$, $B(-3, -9)$, and $C(-3, -6)$. After a series of similarity transformations, the locations of the end points of the hypotenuse of the new image are $A'(6, -4)$ and $C'(4, -2)$. Is it possible to determine the location of point B' ?