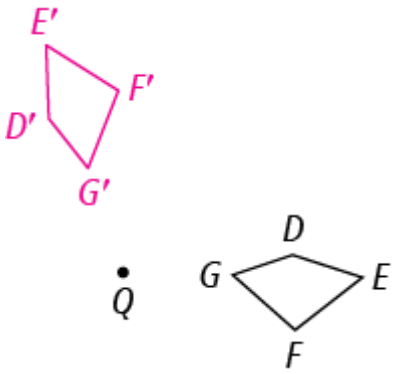
11. No; a rotation is a transformation that rotates each point in the preimage about the center of rotation through the angle of rotation. The angle of rotation is the same and each point and its image are the same distance from the center of rotation, but the distance each point moves varies.

12. If it were a rotation, then Y' would be the vertex at the top of the image. $\triangle X'Y'Z'$ is a reflection of $\triangle XYZ$ about the vertical line that passes through P.

14. $A'(-2, 1) \rightarrow A(1, 2)$
$B'(-4, -2) \rightarrow B(-2, 4)$
$C'(-4, -6) \rightarrow C(-6, 4)$
$D'(-1, -3) \rightarrow D(-3, 1)$

17.



19. $D(0, 5) \rightarrow D'(-5, 0)$
$E(-2, 8) \rightarrow E'(-8, -2)$
$F(-3, -5) \rightarrow F'(5, -3)$

20. $W(4, -2) \rightarrow W'(-2, -4)$
$X(7, 3) \rightarrow X'(3, -7)$
$Y(1, 11) \rightarrow Y'(11, -1)$
$Z(-4, 6) \rightarrow Z'(6, 4)$

28. is equal to; is congruent to; not enough information; is equal to

29. (B) (–7, –11)