**dilation**
A dilation with center $O$ and positive scale factor $r$ takes a point $P$ along the line $OP$ to another point whose distance is $r$ times further away from $O$ than $P$ is. If $r < 1$ then the new point is really closer to $O$, not further away.

The triangle $DEF$ is a dilation of the triangle $ABC$ with center $O$ and with scale factor 3. So $D$ is 3 times further away from $O$ than $A$ is, $E$ is 3 times further away from $O$ than $B$ is, and $F$ is 3 times further away from $O$ than $C$ is.

**similar**
One figure is similar to another if there is a sequence of rigid transformations and dilations that moves the first figure so that it fits exactly over the second.

Triangle $ABC$ is similar to triangle $DEF$ because a rotation about $B$ followed by a dilation with center $O$ takes the first triangle to the second.

**slope**
The slope of a line is the quotient of the vertical distance and the horizontal distance between any two points on the line.
The slope of a line containing the points \((4, 3)\) and \((1, 1)\) is \(\frac{2}{3}\), because the vertical distance between the points is \(3 - 1 = 2\) and the horizontal distance is \(4 - 1 = 3\).