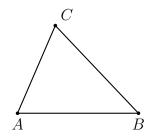
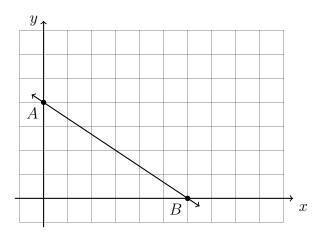
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7-8bDN-Exam-followup

1. Given isosceles $\triangle ABC$ with $\overline{AB} \cong \overline{BC}$, $m \angle B = 48$. Mark and label the diagram, and then find $m \angle A$. (the diagram is not to scale)



2. The line \overrightarrow{AB} has the equation $y = -\frac{2}{3}x + 4$. Apply a dilation mapping $\overrightarrow{AB} \to \overrightarrow{A'B'}$ with a factor of k = 1.5 centered at the origin. Draw and label the image on the grid. Write the equation of the line $\overrightarrow{A'B'}$.



3. A triangle is dilated with factor k such that $\triangle ABC \sim \triangle DEF$. Circle True or False.

(a) T F
$$\angle A \cong \angle E$$

(b) T F
$$\overline{AC} \cong \overline{DF}$$

(c) T F
$$k = \frac{DF}{AC}$$

(d) T F
$$\overline{AC} \to \overline{DF}$$

(e) T F
$$\overline{AC} \cong \overline{DF}$$

(f) T F
$$\frac{DE}{AB} = \frac{EF}{BC}$$

4. Complete the construction of an equilateral triangle with one side as \overline{XY} . Show all construction marks, but make no extra lines.



(a) Identify two circles in the construction. For each, name the center of the circle and the radius.

(b) Assuming that the third vertex of the triangle is point Z, explain why the distance from X to Z is the same as the distance from X to Y.