Use these points.

$A(4,5)$ $B(-2,8)$ $C(7,11)$ $D(-7,-2)$

1. Find a segment congruent to $\overline{AC}$ (use distance formula)

$AC = 9+36 = \sqrt{45}$

$BA = 8-5 = 3^2$

$-2-4 = -6^2$

$+$

$\sqrt{45}$

$(\ )^2 + (\ )^2$

$\overline{AB} \cong \overline{AC}$

$AB = AC$

Use these points.

$A(4,5)$ $B(-2,8)$ $C(7,11)$ $D(-7,-2)$

2. Find a segment parallel to $\overline{AC}$ (use slope)

$\overline{AC} \parallel \overline{BD}$

$mAC = \frac{11-5}{7-4} = \frac{6}{3} = 2$

~~mAB~~ $\frac{8-5}{-2-4} = \frac{3}{-6} = -\frac{1}{2}$

~~mBC~~

$m\overline{BD} = \frac{8+2}{-2+7} = \frac{10}{5} = 2$

Use these points.

$A(4,5)$ $B(-2,8)$ $C(7,11)$ $D(-7,-2)$

3. Find a segment perpendicular to $\overline{AC}$ (use slope)

$\overline{AC} \perp \overline{AB}$