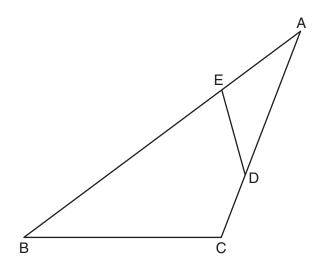
Name:

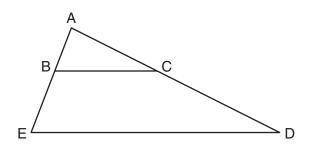
10 March 2017 **Test: Similarity**

25. The diagram below shows $\triangle ABC$, with \overline{AEB} , \overline{ADC} , and $\angle ACB \cong \angle AED$. Prove that $\triangle ABC$ is similar to $\triangle ADE$.



1 2

26. In the diagram below of $\triangle ADE$, B is a point on \overline{AE} and C is a point on \overline{AD} such that $\overline{BC} \parallel \overline{ED}$, AC = x - 3, BE = 20, AB = 16, and AD = 2x + 2. Find the length of \overline{AC} .



27. In the diagram below, $\triangle ABC \sim \triangle DEF$, DE = 4, AB = x, AC = x + 2, and DF = x + 6. Determine the length of \overline{AB} . [Only an algebraic solution can receive full credit.]

