

3. (a) Are the two triangles ( $\triangle AED$  and  $\triangle ABC$ ) in the figure on the right similar if  $\frac{AE}{AB} = \frac{AD}{AC}$ ? If so, state

why and name the pair of similar triangles in the correct order.





In the figure on the left, AC = 18 units, BC = 24 units, DC = 6 units and EC = 8 units. Are  $\triangle CDE$  and  $\triangle CAB$ similar?

- (a) Are any two equilateral triangles similar?
- (b) If two isosceles triangles have equal vertex angles, are the triangles
- (c) If two isosceles triangles have equal base angles, are the triangles similar? similar?