Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Points: \_\_\_\_\_\_

1. a) If , show that  and  are similar.

1. Find x, CE, CB and AB.

 C

4

 x

 D E

2x

A x+7 B

2. In the figure AB and CD are parallel, AB=x+5, AE=x+3, CD=x+1 and DE=x.

1. How are the triangles related?
2. Find x, AB, AE, CD and DE.

A

B

E

C

D

3. In the right triangle ,, AC = x+7 , BC = x and AB = x+9.

a) Find x and all three sides.

b) Find the area and perimeter of the triangle.

B

C A