**Secondary Math 2 – Homework NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4-3 Triangle Proportionality PERIOD \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

D

A

B

C

**1.** **Complete.**

a. AD = 21, DC = 14, AC = 25, AB = \_\_\_

b. AB = 2*x* - 12, BC = *x*, CD = *x* + 5, AD = 2*x* – 4, AC = \_\_\_

2. In the diagram,  , CA = 9, DA = 3, and CE = 10. Find EB.

C

D

E

B

A

3. In the diagram, D is a point on  , and E is a point on  such that. If AB = 8, DB = 6, and BC = 16, what is BE?

B

D

A

C

E

4. An isosceles triangle has two sides of length 21 cm and a base of 24 cm. The base of a similar triangle is 16 cm. Find the perimeter of the smaller triangle.

5. In the diagram, . If BD = 3, BE = 4, and AB = 12, what is EC?

B

D

A

E

C

6. Write 4 different equal proportions for the figure.

*k*

*s*

*r*

*b*

*a*

*n*

*t*

*j*

a.

b.

c.

d.