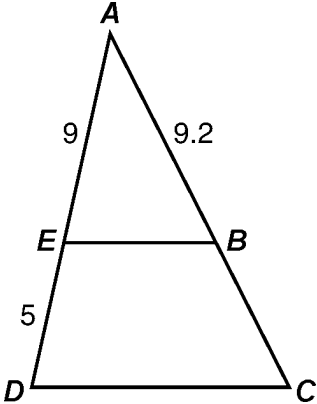


Name: _____
CC Geometry

Proportions with Similar Triangles

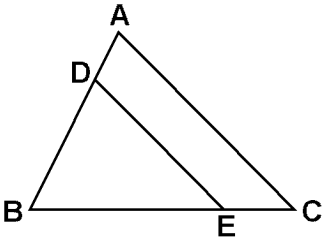
- 1) In the diagram of $\triangle ADC$ below, $\overline{EB} \parallel \overline{DC}$, $AE = 9$, $ED = 5$, and $AB = 9.2$.



What is the length of \overline{AC} , to the nearest tenth?

- A) 5.2
- B) 14.4
- C) 14.3
- D) 5.1

- 2) In the diagram below of $\triangle ABC$, $\overline{DE} \parallel \overline{AC}$, $DB = 6$, $AD = 2$, and $DE = 9$.

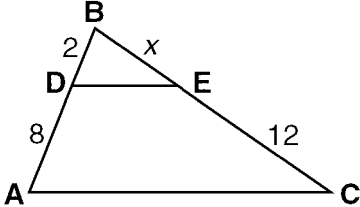


Find AC.

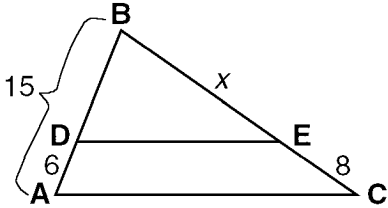
Questions 3 and 4 refer to the following:

In $\triangle ABC$, find x given that $\overline{DE} \parallel \overline{AC}$.

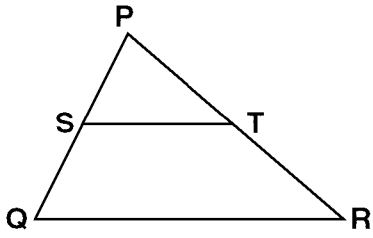
3)



4)

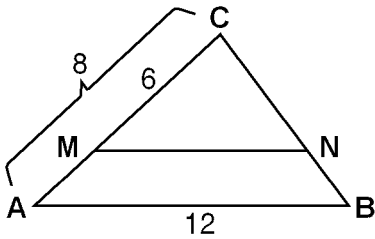


5)



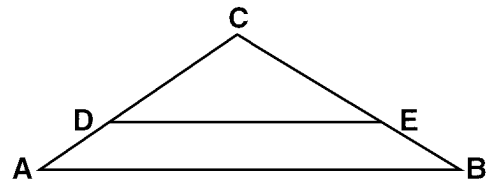
If $\overline{ST} \parallel \overline{QR}$, $PQ = 10$, $SQ = 4$, and $PR = 5$, find \overline{PT} .
 [Show all work.]

6) In the accompanying diagram of $\triangle ABC$, $\overline{MN} \parallel \overline{AB}$, $AC = 8$, $AB = 12$, and $CM = 6$.



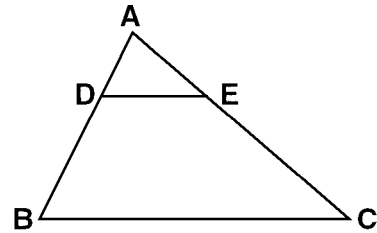
Find the length of \overline{MN} .

7) In the diagram below, $\overline{DE} \parallel \overline{AB}$.



If $CE = 3$, $CB = 5$, and $DE = 9$, find AB .

8) In the accompanying diagram of $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$, $AD = 3$, $AB = 9$, and $AE = 5$.



Find EC .

- 1) C
- 2) 12
- 3) 3
- 4) 12
- 5) 3

SAMPLE WORK: Let $x = PT$, $PS = PQ - SQ = 10 - 4 = 6$, $\frac{x}{5} = \frac{6}{10}$, $10x = 30$, $x = 3$

- 6) 9
- 7) 15
- 8) 10