Lesson 8.5 Practice: Proportions in Triangles

School Launch · Geometry · Unit 8: Similarity · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 3$, $DB = 11$, $AE = 9$. Find EC. EASY

2. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 11$, $DB = 10$, $AE = 2$. Find EC.

EASY

3. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 10$, $DB = 7$, $AE = 3$. Find EC. EASY

4. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 11$, $DB = 2$, $AE = 4$. Find EC.

MEDIUM

5. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 6$, $DB = 5$, $AE = 3$. Find EC.

MEDIUM

6. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 11$, $DB = 9$, $AE = 9$. Find EC.

MEDIUM

7. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 10$, $DB = 2$, $AE = 5$. Find EC.

MEDIUM

8. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 3$, $DB = 4$, $AE = 7$. Find EC. HARD

9. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 2$, $DB = 2$, $AE = 7$. Find EC. HARD

10. In $\triangle ABC$, $\overline{DE} \parallel \overline{BC}$ with D on $\overline{AB}$ and E on $\overline{AC}$. $AD = 10$, $DB = 4$, $AE = 7$. Find EC.

HARD