Use the figure to complete the proportion.

1. 
$$\frac{GC}{CF} = \frac{?}{DB}$$

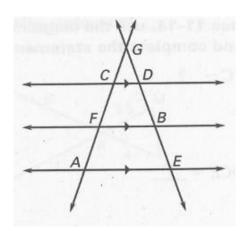
$$2. \ \frac{AF}{FC} = \frac{?}{BD}$$

$$3. \ \frac{CD}{FB} = \frac{GD}{?}$$

$$4. \ \frac{AE}{CD} = \frac{GE}{?}$$

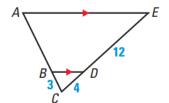
$$5. \ \frac{FG}{AG} = \frac{FB}{?}$$

$$6. \ \frac{GD}{GE} = \frac{?}{AE}$$

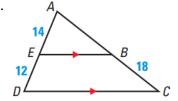


Find the length of  $\overline{AB}$ . Show your work.

7.



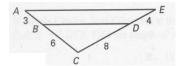
8.



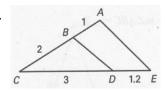
Name: \_\_\_\_\_

Use the given information to determine whether  $\overline{BD} \parallel \overline{AE}$ . Show your work.

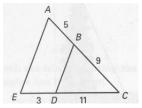
9.



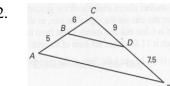
10.



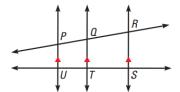
11.



12.



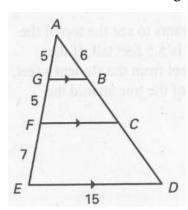
13. For the figure below, which statement is not necessarily true?



$$\mathbf{B} \quad \frac{TS}{UT} = \frac{QR}{PQ}$$

$$\frac{QR}{RS} = \frac{TS}{RS}$$

Find the value of each length. Show your work.



14. *BC* 

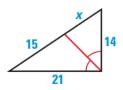
15. *FC* 

16. *GB* 

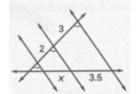
17. *CD* 

Find the value of the variable. Show your work.

18.



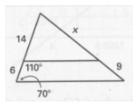
19.



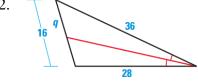
20.



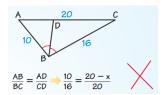
21.



22.



23. A student begins to solve for the length of  $\overline{AD}$  as shown. **Describe** and **correct** the student's error.



24. A student claims that AB = AC using the method shown. **Describe** and **correct** the student's error.

