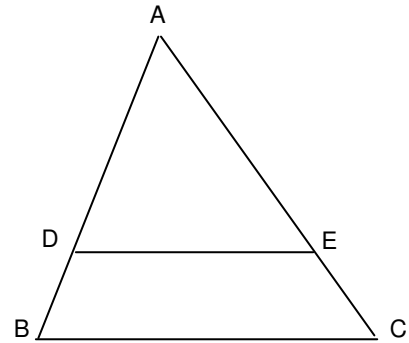


Review Sheet Ch 7 Similarity

1. Refer to the figure, given $DE \parallel BC$

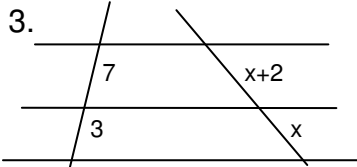
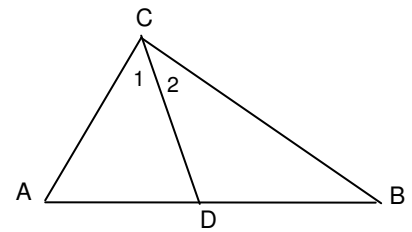
- a) $AD = 7$, $BD = 3$, $DE = 6$ Find BC _____
 b) $AD = 3$, $BD = 5$, $AE = 4$, Find CE _____
 c) $AD = 4$, $AB = 10$, $BC = 25$ Find DE _____
 d) $AD = CE$, $BD = 4$, $AE = 9$ Find AB _____
 e) $AD = x-1$, $BD = 5$, $AE = 1$, $CE = x+3$, $DE = 2x+1$
 Find BC _____



- f) $AD = 2x$, $BD = x+3$, $AE = 4x-1$, $CE = 5x$, $BC = 6x+2$
 Find DE _____

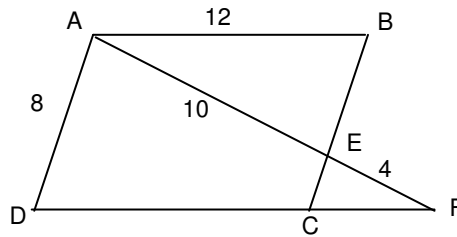
2. Refer to the figure, given $\angle 1 \cong \angle 2$

- a) $AC = 6$, $BC = 8$, $BD = 5$ Find AD _____
 b) $AB = 10$, $AC = 4$, $BC = 8$ Find AD _____
 c) $AC = 3$, $AD = x-4$, $BC = x$, $BD = 4$ Find BC _____



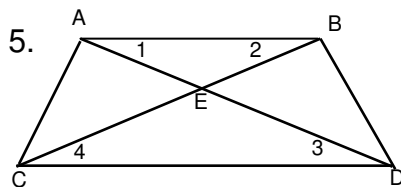
$x =$ _____

4.



ABCD is a parallelogram, sides as marked

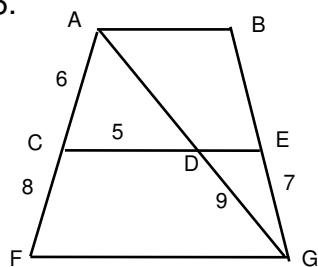
BE _____ CE _____ CF _____



Given: $AB \parallel CD$

Prove: $AE \cdot CE = DE \cdot EB$

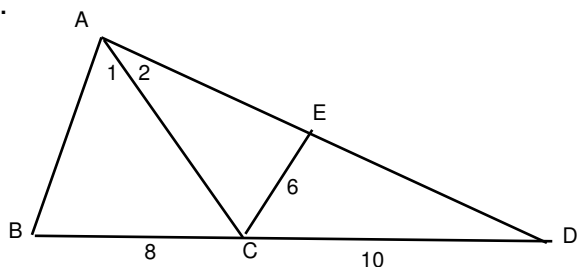
6.



Given $AB \parallel CE \parallel FG$

Find AD _____ BE _____ FG _____

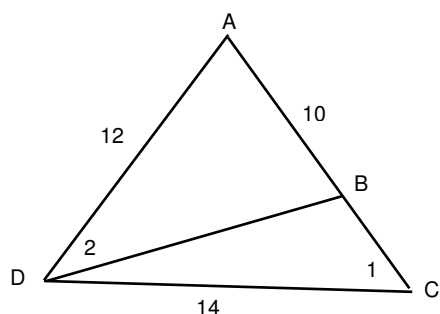
7.



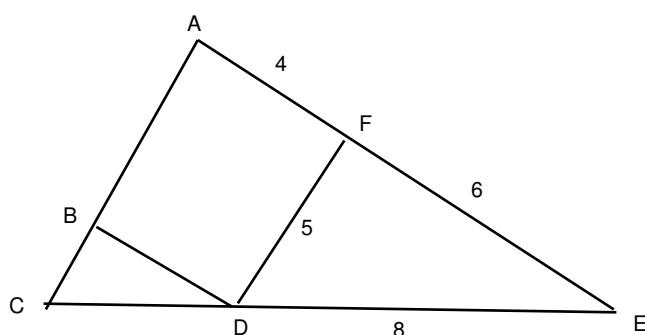
Given $AB \parallel CE$, $\angle 1 \cong \angle 2$

Find AB _____ AD _____ AE _____
DE _____

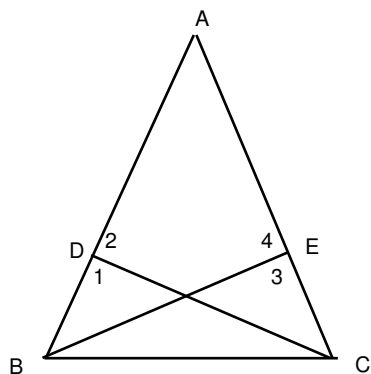
8. Given: $\angle 1 \cong \angle 2$, sides as marked
Find: AC _____ BD _____



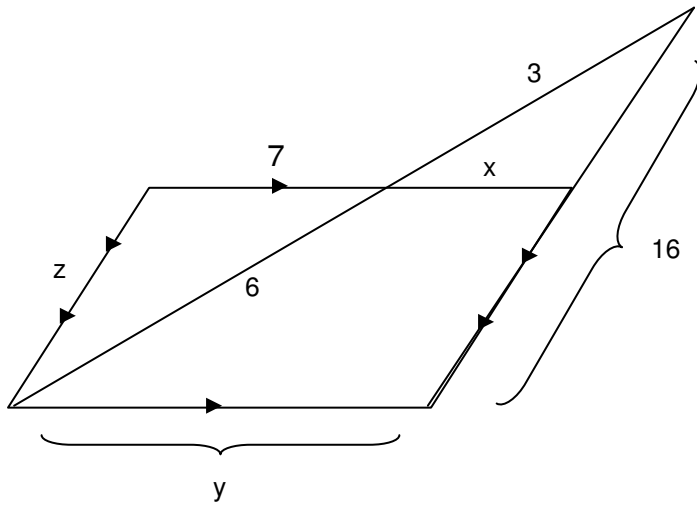
9. Given $BD \parallel AE$, $DF \parallel AC$, sides as marked
Find: AC _____ BD _____ CD _____



10. Given BE and CD are altitudes
Prove: $AE \bullet AC = AD \bullet AB$



11)

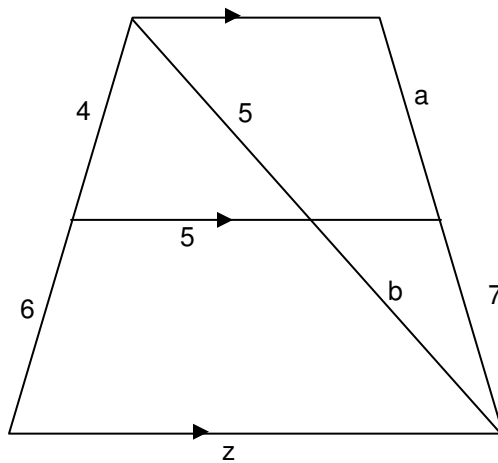


$$x = \underline{\hspace{2cm}}$$

$$y = \underline{\hspace{2cm}}$$

$$z = \underline{\hspace{2cm}}$$

12)

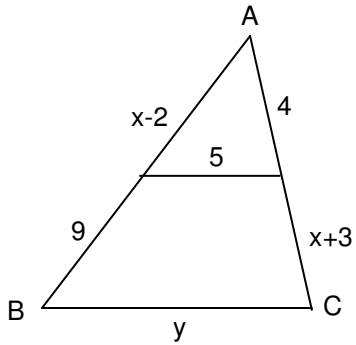


$$a = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

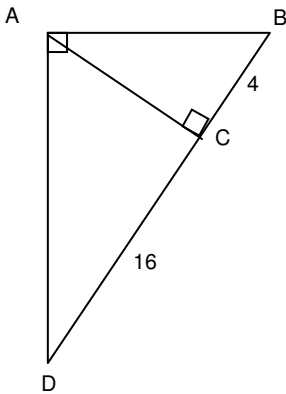
$$z = \underline{\hspace{2cm}}$$

13)



Find y _____

14)



Find AD, AB, AC

Answers:

1. a) $8 \frac{4}{7}$ b) $6 \frac{2}{3}$ c) 10 d) 10 e) 30 f) $4 \frac{2}{5}$, $\frac{2}{3}$

2. a) $3 \frac{3}{4}$ b) $3 \frac{1}{3}$ c) 6

3. $x = 1 \frac{1}{2}$

4. $BE = 5 \frac{5}{7}$ $CE = 2 \frac{2}{7}$ $CF = 4 \frac{4}{5}$

5.
Given
PAIC
AAS
Def of Similarity
Means and Extremes

6. $AD = 6 \frac{3}{4}$ $BE = 5 \frac{1}{4}$ $FG = 11 \frac{2}{3}$

7. $AB = 10 \frac{4}{5}$ $AD = 13.5$ $AE = 6$ $DE = 7.5$

8. $AC = 14 \frac{2}{5}$ $BD = 11 \frac{2}{3}$

9. $AC = 8 \frac{1}{3}$ $BD = 4$ $CD = 5 \frac{1}{3}$

10.

Given

Reflexive

Def Alt.

Def Perp

Subst

AA similar

Def of similar

Means and extremes

11. $x = 3.5$ $y = 10.5$ $z = 10 \frac{2}{3}$

12. $a = 4 \frac{2}{3}$ $b = 7.5$ $z = 12.5$

13. $16 \frac{1}{4}$

14. $AD = 8\sqrt{5}$ $AB = 4\sqrt{5}$ $AC = 8$