

Name Key

Date \_\_\_\_\_ Pd \_\_\_\_\_

**8.4 Proportionality Theorem CYU**

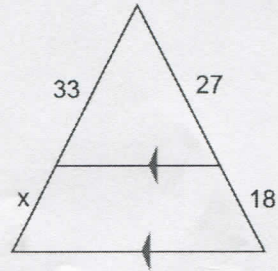
- Use when you get it right all by yourself
- S* Use when you did it all by yourself, but made a silly mistake
- H* Use when you could do it alone with a little help from teacher or peer
- G* Use when you completed the problem in a group
- X* Use when a question was attempted but wrong (get help)
- N* Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Triangle Proportionality Theorem	1 - 3	4 - 6	
Triangle Angle-Bisector Theorem	10 - 11	12	
Two-Transversal Proportionality	7 - 9		

**Triangle Proportionality Theorem:** if a line parallel to one side of a triangle intersects the other two sides, then it divides those sides proportionally.

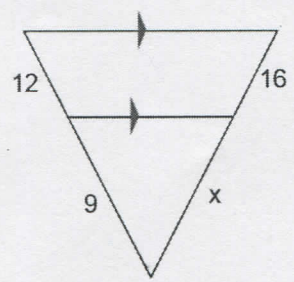
I. Find the value of x.

1.



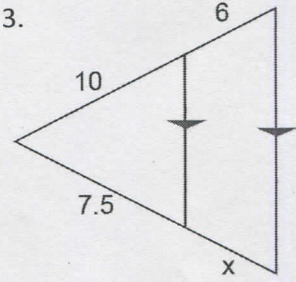
$x = 22$

2.



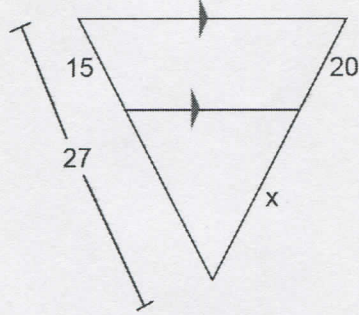
$x = 12$

3.



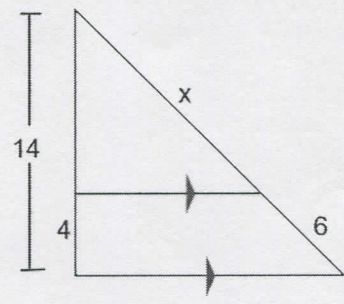
$x = 4.5$

4.



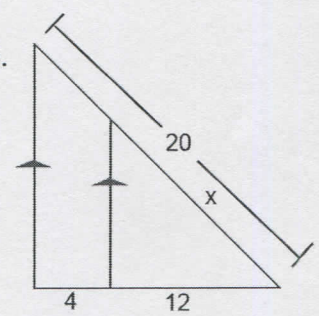
$x = 16$

5.



$x = 15$

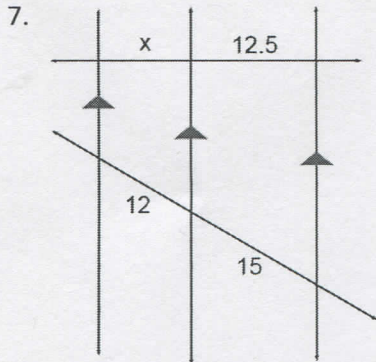
6.



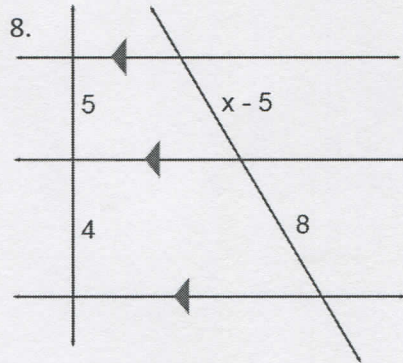
$x = 15$

**Two-Transversal Proportionality:** If three parallel lines intersect two transversals, then they divide the transversals proportionally.

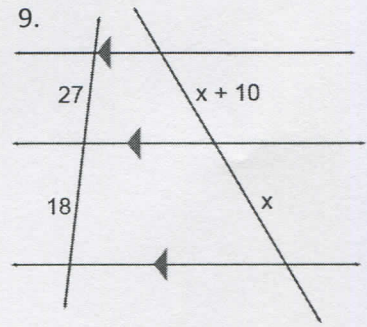
II. Find the value of  $x$ .



$x = 10$



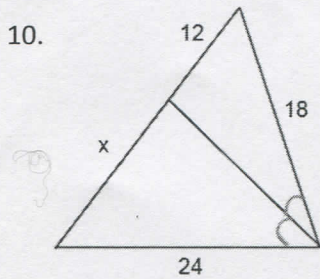
$x = 15$



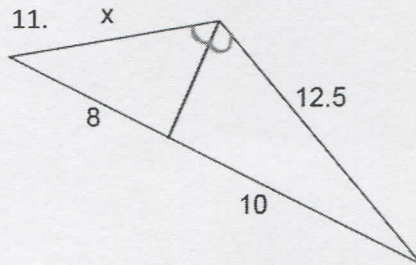
$x = 20$

**Triangle Angle-Bisector Theorem:** If a ray bisects an angle of a triangle, then it divides the opposite side into segments proportional to the other two sides.

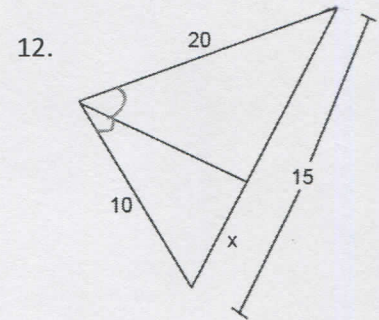
III. Find the value of  $x$ .



$x = 16$



$x = 10$



$x = 5$

**CYU Reflection:** How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

● ● ● ● ● ● ●

1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!

➔