

# Chapter Test C

For use after Chapter 8

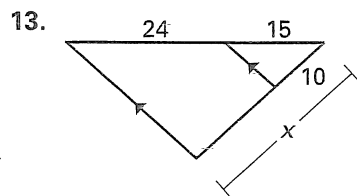
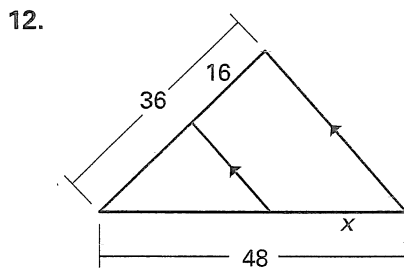
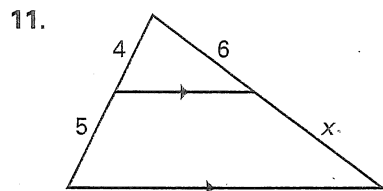
Solve the proportion.

1.  $\frac{3}{4} = \frac{x}{24}$
2.  $\frac{6}{17} = \frac{2x}{68}$
3.  $\frac{x+2}{x} = \frac{7}{6}$
4.  $\frac{2}{5} = \frac{x}{x+15}$
5.  $\frac{5b}{8+b} = \frac{4}{3}$
6.  $\frac{2c-15}{7} = \frac{2c}{9}$

Complete the sentence.

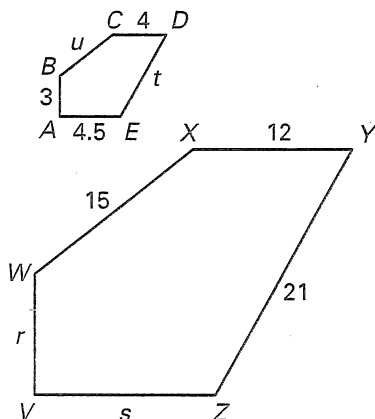
7. If  $\frac{2}{3} = \frac{a}{b}$ , then  $\frac{b}{3} =$  ?
8. If  $\frac{5}{8} = \frac{m}{n}$ , then  $\frac{10}{16} =$  ?
9. If  $\frac{7}{p} = \frac{3}{q}$ , then  $\frac{7+p}{p} =$  ?
10. If  $\frac{9+m}{m} = \frac{9}{3}$ , then  $\frac{9}{m} =$  ?

In Exercises 11–13, use the diagram to find  $x$ .



In Exercises 14–18,  $ABCDE \sim VWXYZ$ .

14. Find the scale factor of  $ABCDE$  to  $VWXYZ$ .
15. Find the scale factor of  $VWXYZ$  to  $ABCDE$ .
16. Find the values of  $r$ ,  $s$ ,  $t$ , and  $u$ .
17. Find the perimeter of each polygon.
18. Find the ratio of the perimeter of  $ABCDE$  to the perimeter of  $VWXYZ$ .



## Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16.  $s =$  \_\_\_\_\_  
 $t =$  \_\_\_\_\_  
 $u =$  \_\_\_\_\_
17.  $ABCDE:$  \_\_\_\_\_  
 $VWXYZ:$  \_\_\_\_\_
18. \_\_\_\_\_