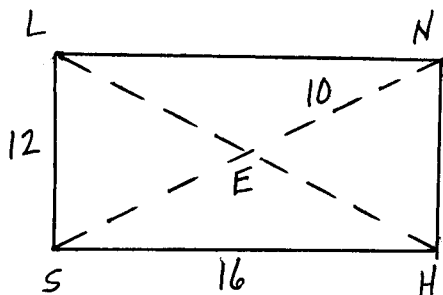


REVIEW PROBLEMS  
(Chapter 8)

FILL IN THE BLANKS WITH always, sometimes or never:

1. Two rectangles are \_\_\_\_\_ similar.
2. Two regular polygons are \_\_\_\_\_ similar.
3. Two congruent triangles are \_\_\_\_\_ similar.

QUADRILATERAL LNHS IS A RECTANGLE. WRITE EACH RATIO IN SIMPLEST FORM:



4.  $LN : NH$
5.  $SH : LS : LH$
6.  $m\angle HNS : m\angle SEH$

ANSWER THE FOLLOWING:

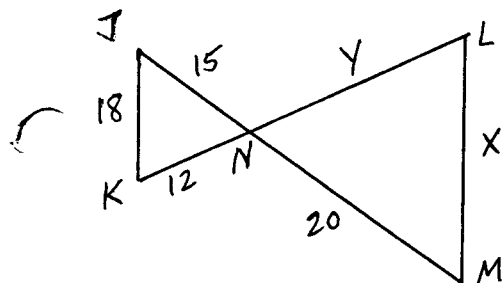
7. If  $\frac{3}{x} = \frac{7}{2}$  then  $b =$  \_\_\_\_\_
8. In the proportion  $\frac{5}{9} = \frac{m}{k}$ , the means are \_\_\_\_\_ and the extremes are \_\_\_\_\_
9. If  $12x = 8y$ , find the ratio of  $x$  to  $y$ .

FIND THE VALUE(S) OF  $x$ :

10.  $\frac{x-2}{4} = \frac{x}{8}$

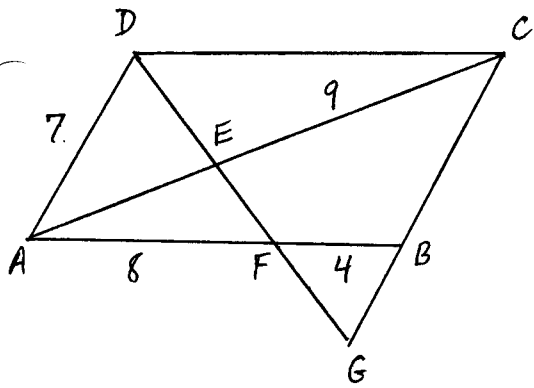
11.  $\frac{10}{3x-2} = \frac{5}{x+2}$

IF  $\triangle JKN \sim \triangle MLN$ , FIND  $x$  AND  $y$ :



12.  $x =$  \_\_\_\_\_
13.  $y =$  \_\_\_\_\_

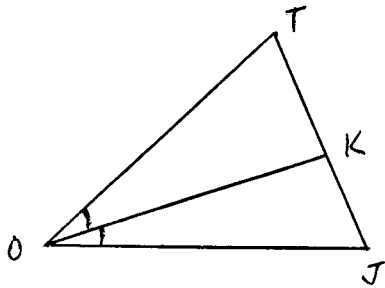
GIVEN  $\square DCBA$ , FIND AE AND BG:



14.  $AE =$  \_\_\_\_\_

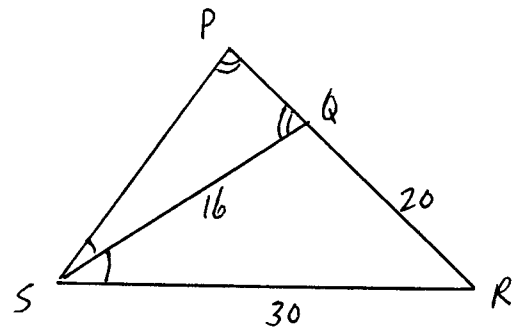
15.  $BG =$  \_\_\_\_\_

FIND JK IF  $OJ = 24$ ,  $OT = 36$   
AND  $JT = 40$ :



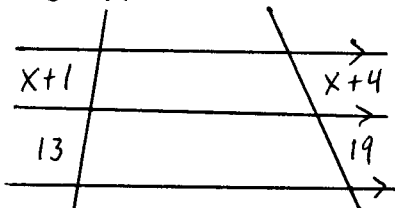
16.  $JK =$  \_\_\_\_\_

FIND PQ:



17.  $PQ =$  \_\_\_\_\_

FIND X:



18.  $X =$  \_\_\_\_\_

19. SIMPLIFY THE FOLLOWING:

$$\frac{x^2 - 9}{x^2 - x - 6}$$

20. GIVEN  $A(2, -3)$  AND  $B(-6, 8)$   
FIND AB.

★ ANSWERS ★

1. Sometimes

5.  $4:3:5$

9.  $\frac{2}{3}$

13.  $y = 16$

17.  $PQ = \frac{32}{3}$

2. sometimes

6.  $1:2$

10.  $x = 4$

14.  $AE = 6$

18.  $x = 5.5$

3. always

7.  $7x$

11.  $x = 6$

15.  $BG = 3.5$

19.  $\frac{x+3}{x+2}$

4.  $4:3$

8.  $9, m$  and  $5, k$

12.  $x = 24$

16.  $JK = 16$

20.  $\sqrt{165}$