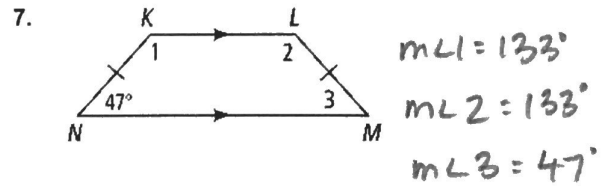
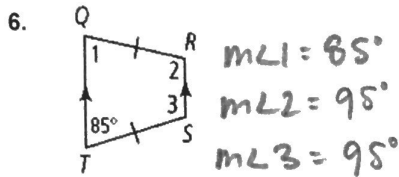
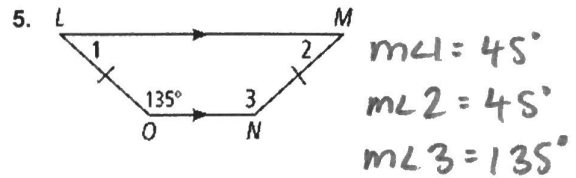
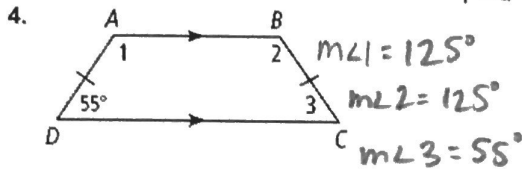
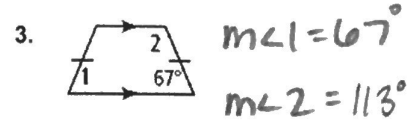
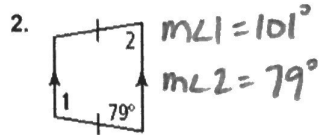
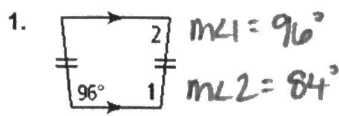
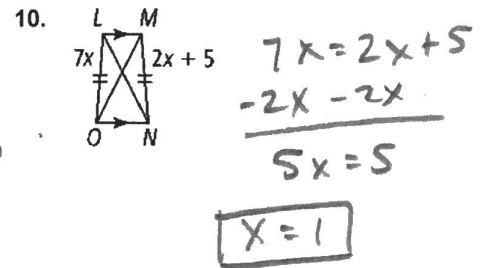
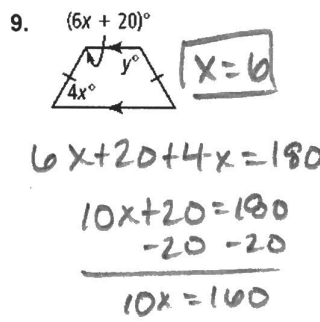
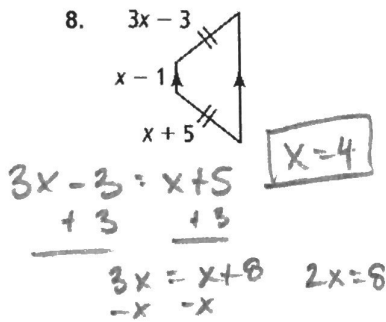


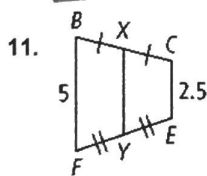
Find the measures of the numbered angles in each isosceles trapezoid.



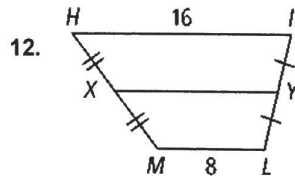
Algebra Find the value(s) of the variable(s) in each isosceles trapezoid.



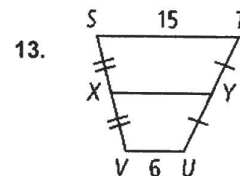
Find  $XY$  in each trapezoid.



$$\frac{2.5 + 5}{2} = 3.75$$

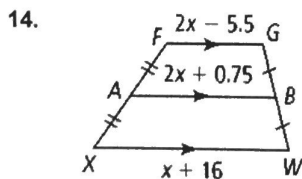


$$\frac{8 + 16}{2} = 12$$



$$\frac{6 + 15}{2} = 10.5$$

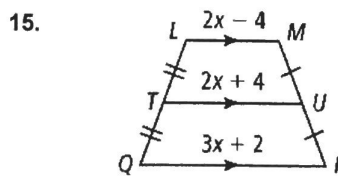
Algebra Find the lengths of the segments with variable expressions.



$$\frac{2x - 5.5 + x + 16}{2} = (2x + 7.5) \cdot 2$$

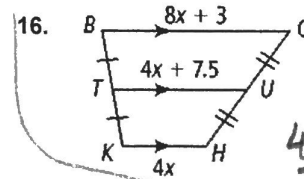
$$3x + 10.5 = 4x + 15$$

$$x = 9 \quad AB = 18.75$$



$$\frac{2x - 4 + 3x + 2}{2} = 2x + 4$$

(correct set-up)



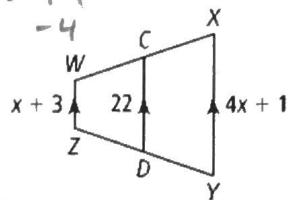
$$\frac{4x + 8x + 3}{2} = 4x + 7.5$$

(correct set-up)

$$2 \cdot \frac{x+3+4x+1}{2} = (22)2$$

$$5x + 4 = 44$$

$$\begin{array}{r} -4 \\ -4 \end{array}$$



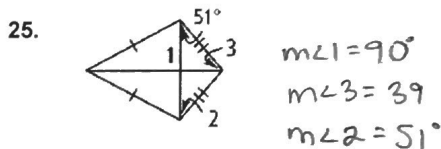
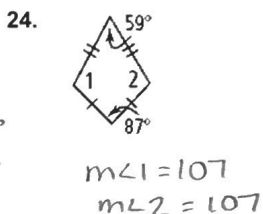
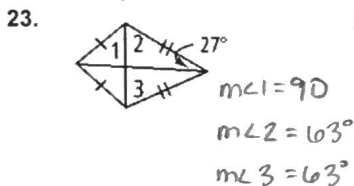
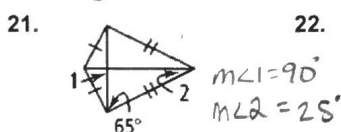
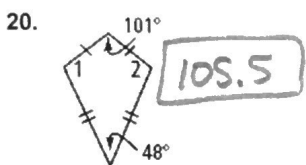
17.  $\overline{CD}$  is the midsegment of trapezoid  $WXYZ$ .

- a. What is the value of  $x$ ?  $x = 8$   
 b. What is  $XY$ ?  $33$   
 c. What is  $WZ$ ?  $11$

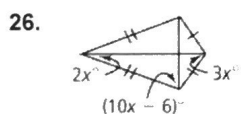
18. **Reasoning** The diagonals of a quadrilateral form two acute and two obtuse angles at their intersection. Is this quadrilateral a kite? Explain.

19. **Reasoning** The diagonals of a quadrilateral form right angles and its side lengths are 4, 4, 6, and 6. Could this quadrilateral be a kite? Explain.

Find the measures of the numbered angles in each kite.



**Algebra** Find the value(s) of the variable(s) in each kite.



$$2x + 10x - 6 + 90 = 180$$

$$12x + 84 = 180$$

$$\begin{array}{r} -84 \\ -84 \end{array}$$


---


$$12x = 96$$

$$\boxed{x = 8}$$



$$8x + 5x - 1 + 90 = 180$$

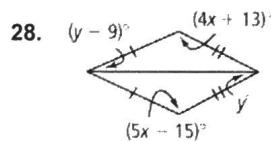
$$13x + 89 = 180$$

$$\begin{array}{r} -89 \\ 89 \end{array}$$


---


$$13x = 91$$

$$\boxed{x = 7}$$



$$5x - 15 = 4x + 13$$

$$\begin{array}{r} +15 \\ +15 \end{array}$$


---

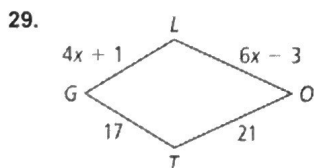

$$5x = 4x + 28$$

$$\begin{array}{r} -4x \\ -4x \end{array}$$


---


$$\boxed{x = 8}$$

For which value of  $x$  is each figure a Kite?



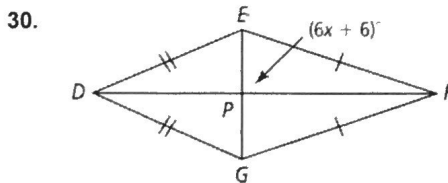
$$4x + 1 = 17$$

$$\begin{array}{r} -1 \\ -1 \end{array}$$


---


$$4x = 16$$

$$\boxed{x = 4}$$



$$6x + 6 = 90$$

$$\begin{array}{r} -6 \\ -6 \end{array}$$


---


$$6x = 84$$

$$\boxed{x = 14}$$