Name_____ Date_____

6.5 – Trapezoids and Kites

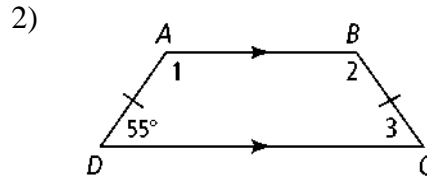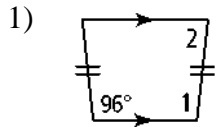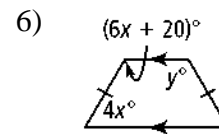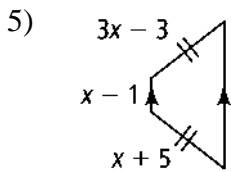Find the measures of the numbered angles in each isosceles trapezoid.
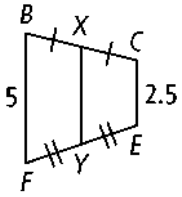
1)

2)

3)

4)
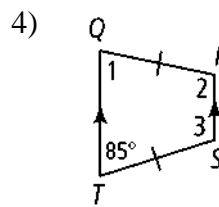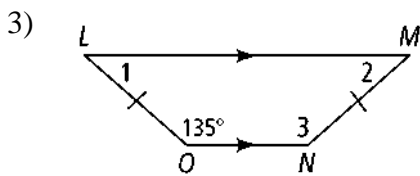
Find the value(s) of the variable(s) in each isosceles trapezoid.
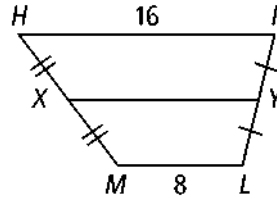
5)

6)

Find *XY* in each trapezoid.
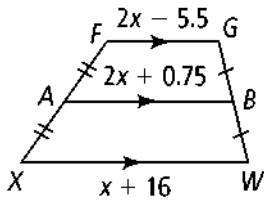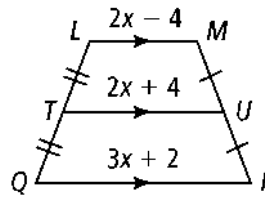
7)

8)

Find the lengths of the segments with variable expressions.
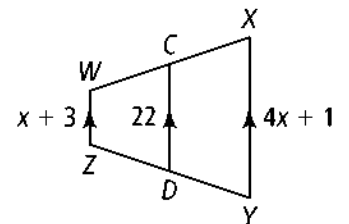
9)

10)

11) $\overline{CD}$ is the midsegment of trapezoid *WXYZ*.
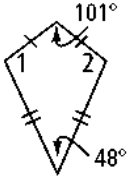
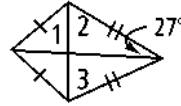a. What is the value of *x*?

b. What is *XY?*

c. What is *WZ?*

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

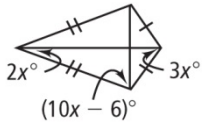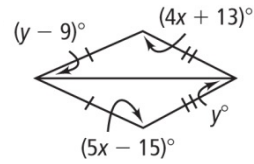Find the measures of the numbered angles in each kite.

13)

101°

1 2

48°

14)

1 2   27°

3

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

15)

$2x°$ $3x°$

$(10x - 6)°$

16) $(y - 9)°$ $(4x + 13)°$

$y°$

$(5x - 15)°$

17)

L

$4x + 1$ $6x - 3$

G O

17 21

T

18)

E $(6x + 6)°$

D F

P

G