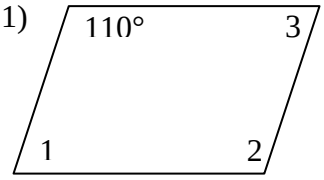
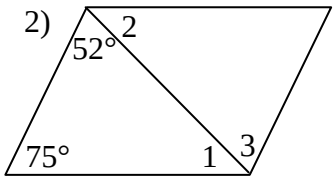
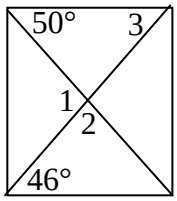
Chapter 6 Quiz Name _____

Find the measure of the numbered angles for each parallelogram.

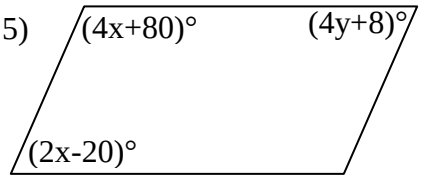
1) 

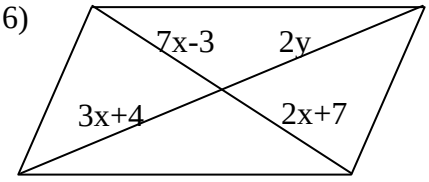
2) 

3) 

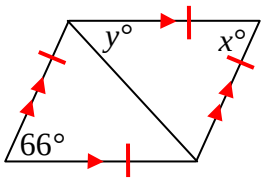
4) What is the most precise name of the quadrilateral with vertices (-1, 2), (3, 4), (5, 0), (1**,** -2)?

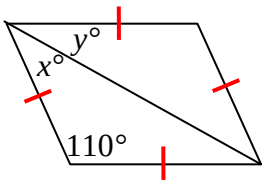
Find the values of the variables for which each figure is a parallelogram.

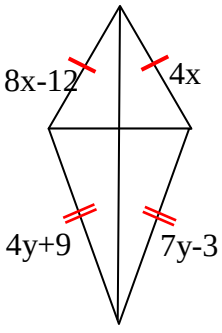
5) 

6) 

Find the values of the variables.

7) 

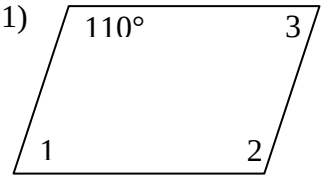
8) 

9) 

Chapter 6 Quiz Name _____

Find the measure of the numbered angles for each parallelogram.

1)



$m\angle 2 = 110\ (opp\ \angle's \cong)$

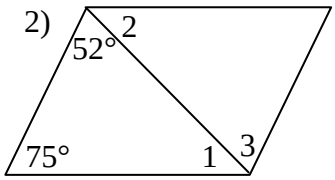
$\angle 1 \cong \angle 3\ (opp\ \angle's \cong)$

$m\angle 1 + m\angle 2 = 180\ (\text{consec}\ \angle's\ \text{suppl})$

$m\angle 1 + 110 = 180, m\angle 1 = 70$

$m\angle 1 = 70,\ m\angle 2 = 110,\ m\angle 3 = 70$

2)



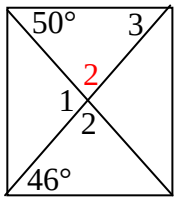
$m\angle 3 = 52\ (\text{alt int}\ \angle's)$

$m\angle 2 + 52 + 75 = 180,\ m\angle 2 = 53$

$m\angle 1 = m\angle 2$

$m\angle 1 = 53,\ m\angle 2 = 53,\ m\angle 3 = 52$

3)



$m\angle 3 = 46\ (\text{alt int}\ \angle's)$

$m\angle 2 + m\angle 3 + 50 = 180$

$m\angle 1 + m\angle 2 = 180$

$m\angle 1 = 96, m\angle 2 = 84, m\angle 3 = 46$

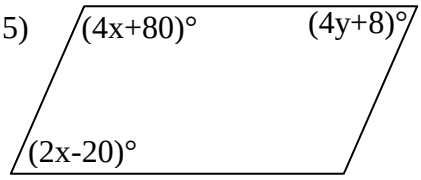
4) What is the most precise name of the quadrilateral with vertices (-1, 2), (3, 4), (5, 0), (1, -2)?

SQUARE – all sides have same length (dist formula), all $\angle's$ 90° (slope)

Side len = $2\sqrt{5}$, slopes are -2 and ½

Find the values of the variables for which each figure is a parallelogram.

5)

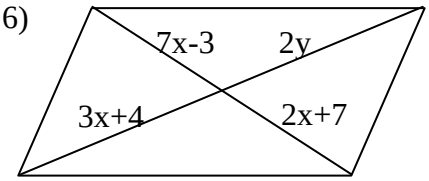


$(4x + 80) + (2x - 20) = 180,\ x = 20$

$2x - 20 = 4y + 8,\ 40 - 20 = 4y + 8,\ y = 3$

$x = 20,\ y = 3$

6)



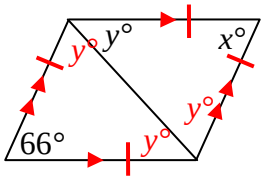
$7x - 3 = 2x + 7; x = 2$

$2y = 3x + 4;\ 2y = 6 + 4; y = 5$

$x = 2, y = 5$

Find the values of the variables. Diagrams not necessarily drawn to scale.

7)



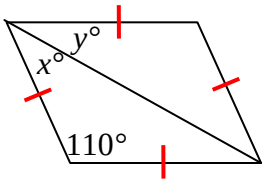
Rhombus

$x = 66$

$x + y + y = 180; 66 + 2y = 180$

$y = 57$

8)



Rhombus

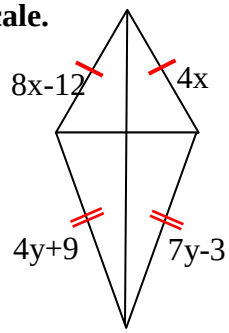
$x = y$

$x + y + 110 = 180$

$2x + 110 = 180$

$x = 35,\ y = 35$

9)



Kite

$8x - 12 = 4x$

$7y - 3 = 4y + 9$

$x = 3,\ y = 4$