

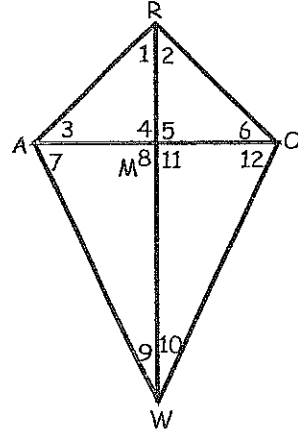
Assigned: Wednesday,
Feb. 2 Due: Thursday, Feb. 3

Geometry
Worksheet - Kites

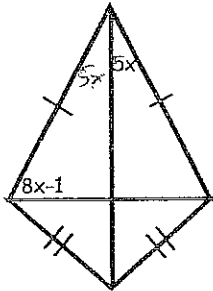
Name _____
Date _____ Period _____

1. Given: AROW is a kite
 $m\angle 1 = 40^\circ$
 $m\angle 10 = 30^\circ$
 $AO = 10$

- Find: $m\angle 2 = 40$
 $m\angle 3 = 50$
 $m\angle 4 = 90$
 $m\angle 5 = 90$
 $m\angle 6 = 50$
 $m\angle 7 = 60$
 $m\angle 8 = 90$
 $m\angle 9 = 30$
 $m\angle 11 = 90$
 $m\angle 12 = 60$
 $MO = 5$

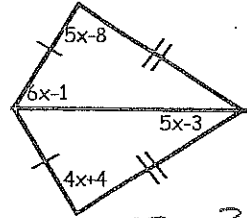


2. Find x
 $x = 7$



$$70 + 13x - 1 = 180$$

3. Find x
 $x = 12$

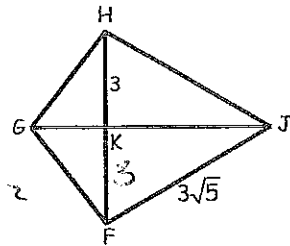


$$5x - 8 + 6x - 1 + 5x - 3 = 180$$

$$5x - 8 = 4x + 4$$

$$x = 12$$

4. Kite FGHJ
 $KF = 3$
 $KJ = 6$

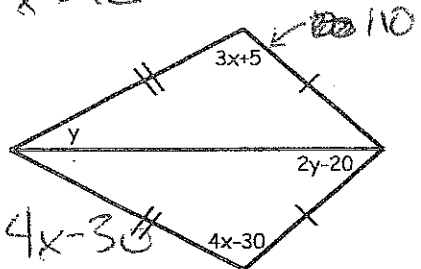


$$3^2 + b^2 = (3\sqrt{5})^2$$

$$9 + b^2 = 45$$

$$b = 6$$

5. $x = 35$
 $y = 30$



$$3x + 5 = 4x - 30$$

$$35 = x$$

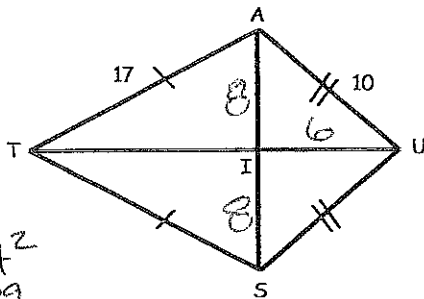
$$x = 35$$

$$y + 2y - 20 + 10 = 180$$

$$3y = 90$$

$$y = 30$$

6. $AS = 16$
 $UI = 6$
 $IT = 15$
 $UT = 21$



$$8^2 + b^2 = 17^2$$

$$64 + b^2 = 289$$

7. The perimeter of a kite is 66 cm. The length of one of its sides is 3 cm. less than twice the length of another. Find the length of each side of the kite.

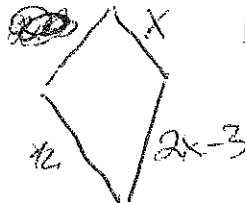
$$2(2x - 3) + 2(x) = 66$$

$$4x - 6 + 2x = 66$$

$$6x = 72$$

$$x = 12$$

SIDES =
 12, 12, 21, 21



$$P = 66$$