PAP Geometry Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Quadrilateral Review

**Rectangle**

1. ABCD is a rectangle. If AB = 2x + 14, CD = 4x – 12, and AD = 9, find AB and AC.
2. EFGH is a rectangle. If m∠HEG = (2x + 5)° and m ∠EFH = (7x – 5)°, find x and m ∠FHG.

**Rhombus**

1. FGHK is a rhombus with diagonals meeting at D. If m ∠FKD = (7x + 10)°, m ∠HKD = (4x + 31)°, and m ∠FDG = (17y – 12)°, find the value of x and y.
2. ABCD is a rhombus. If m∠ABC = (4x + 45)° and m ∠ADC = (x2)°, find m ∠ABC and m ∠BDC.

**Square**

1. JKLM is a square with diagonals meeting at R. If m ∠MJR = (8x + 5)°, and m∠KRL = (7y + 6)°, find the value of x and y.
2. If ABCD is a square with diagonals intersecting at E, and BE = x + 1 and BD = 4x – 20, find x, then find CE.

**Trapezoid**

1. ABCD is a trapezoid with legs BC and AD. EF is the midsegment. If AB = 3x-3, EF = 2x+1, and DC = 8, find the value of x.
2. RSTV is an isosceles trapezoid with legs RV and TS. The diagonals intersect at W. RT = 84, VW = x², WS = 2x + x². Find x.

**Kite**

1. KITE is a kite with . The diagonals meet at point S. If the , find x.
2. KITE is a kite with . The diagonals meet at point S. If  and *m∠KIS* = 3x + 26, find the .