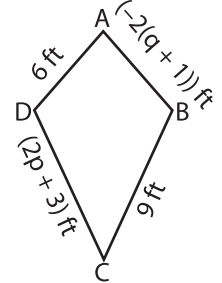Name : _____

Two-Step Equations: Shapes

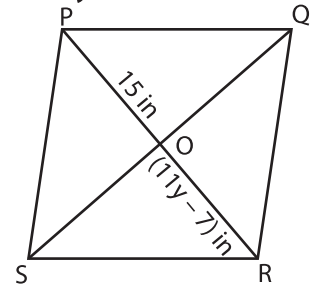Solve each problem.

1) ABCD is a kite. Two pairs of sides have equal lengths. Find the value of p and q.

p = _____ ; q = _____

2) PQRS is a rhombus ~~diagonals~~ value of y.

y = _____

3) UVWX is a rectangle

r = _____
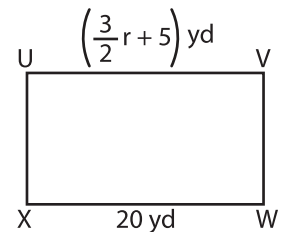
4) KLMN is a right trapezoid ~~line KN. Find the~~ e KN. Find the value of a.

a = _____
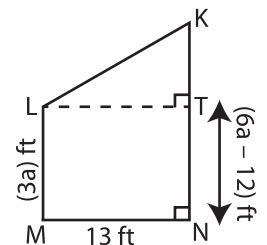
5) EFGH is a rectangle. A line drawn from the vertex E bisects the side HG at L. If LG = 5 in, find the value of z.

z = _____

Figure for problem 1 (kite ABCD): side DA $= 6$ ft, side AB $= (-2(q+1))$ ft, side DC $= (2p+3)$ ft, side BC $= 9$ ft.

Figure for problem 2 (rhombus PQRS): diagonal $= 15$ in, segment $OR = (11y - 7)$ in, with center O.

Figure for problem 3 (rectangle UVWX): top side $UV = \left(\frac{3}{2}r + 5\right)$ yd, bottom side $XW = 20$ yd.

Figure for problem 4 (right trapezoid KLMN): side $LM = (3a)$ ft, bottom $MN = 13$ ft, side KN with $TN = (6a - 12)$ ft.

Figure for problem 5 (rectangle EFGH): $HL = (5(z - 2))$ in, $LG = 5$ in.