Answer on Question#37851-Math-Geometry

Question

Lines p and q intersect to form adjacent angles 1 and 2. If angle 1=8x+4 and angle 2=9x-4 find x so that p is perpendicular to q.

Solution



Since p is perpendiculat to q, angle 1 is equal to angle 2 and

$$9x - 4 = 8x + 4$$
$$9x - 8x = 4 + 4$$
$$x = 8$$

Answer: x = 8