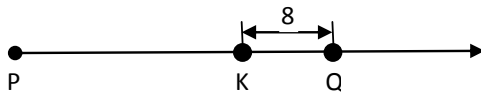


Solution:



$$PQ = 10x - 16$$

$$PK = 6x + 8$$

$$KQ = 8$$

From the picture:

$$PQ = PK + KQ$$

$$10x - 16 = 6x + 8 + 8$$

$$10x - 16 = 6x + 16$$

$$4x = 32$$

$$x = 8$$

$$PQ = 80 - 16 = 64$$