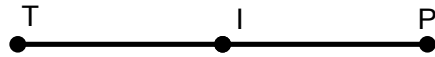Points T,I, and P are collinear. Point I is the midpoint of TP . TI=14, TP=9x-17 solve solve for x

Solution:

Points are collinear if they lie on the same line.

Given:

TI = 14 , TP = 9x − 17 and TI = IP , so

TI + IP = 2TI = TP and so

28 = 9x − 17

9x = 45

Answer: x = 5