

November 7th

$$\sqrt{3^2 + 4^2 + 12^2} = \sqrt{3^2 + 4^2} + \sqrt{x^2}$$

$$\sqrt{3^2 + 4^2 + 12^2} = 13$$

$$\sqrt{3^2 + 4^2} = 5$$

$$\therefore \sqrt{x^2} = 8$$

$$\therefore \mathbf{x = 8}$$