

5) Solve the following simultaneous equations

$$1) 25x + 3y = 39 \quad (1)$$

$$3x + 8y - 2y = 42 \quad (2)$$

$$10x + 6 = 78 \quad (3)$$

$$24x + 6 = 126 \quad (4)$$

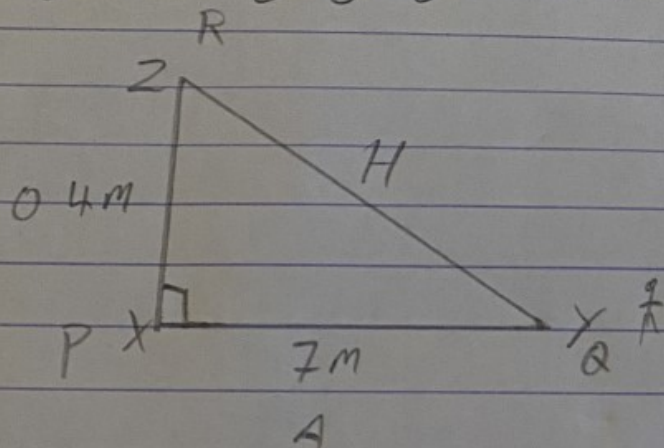
$$34x = 204$$

$$x = \frac{204}{34}$$

$$x = 6$$

7) In the following right angled triangle, if XZ is 4m and XY is 7m. Calculate:

- i) Angle Y
- ii) Angle Z
- iii) Length YZ using Pythagoras theorem



$$\cos Z = \frac{7}{H}$$

$$\cos Z = 0.4$$

$$Z = \cos^{-1}(0.4)$$

$$Z = 25.84^\circ$$

$$Y = 90 + 25.84 = 113.256$$

$$180 - 113.256 = 66.74$$

$$Y = 66.74$$