

ACHA3000
2103851

$$\begin{aligned} 5. \quad 6x + 5y &= 35 \quad \times 4 \\ 7x - 4y &= 31 \quad \times 5 \end{aligned}$$

$$\begin{aligned} 24x + 20y &= 140 \\ 35x + 20y &= 155 \quad + \\ \hline 54x &= 295 \\ x &= 5 \end{aligned}$$

$$\begin{aligned} (6 \times 5) + 5y &= 35 \\ 30 + 5y &= 35 \\ 5y &= 5 \\ y &= 1 \end{aligned}$$

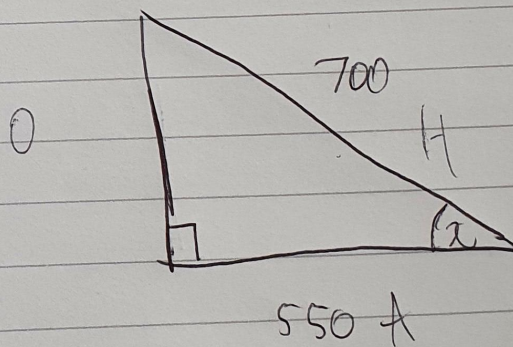
$$6-i) 10p^3q^2 - 5p^2q + 15p^4q$$

$$5p^2q (2pq - 1 + 3p^3q)$$

$$ii) 2x^2y - 4xy^2$$

$$2xy (x - y)$$

$$\begin{aligned} 7-i) a^2 + 550^2 &= 700^2 \\ a^2 &= 700^2 - 550^2 \\ a^2 &= 187500 \\ a &= \sqrt{187500} \\ a &= 433.01 \text{ m} \end{aligned}$$



$$ii) \cos x = \frac{550}{700}$$

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$$\begin{aligned} \cos x &= \frac{11}{14} \\ x &= \cos^{-1}\left(\frac{11}{14}\right) \\ x &= 38.21^\circ \end{aligned}$$