

#14 (§2.5)

$$\left. \begin{array}{l} \angle A \text{ comp. } \angle B \\ \angle B \text{ comp. } \angle C \end{array} \right\} \angle A \cong \angle C$$

$$\therefore 3x + y = 3y - 3$$

$$3x = 2y - 3 \quad (\text{pause})$$

$$x = \frac{2y-3}{3}$$

$$(x + 4y + 2) + 3x + y = 90$$

$$4x + 5y + 2 = 90$$

$$4\left(\frac{2y-3}{3}\right) + 5y = 88$$

$$\frac{8}{3}y - 4 + 5y = 88$$

$$\frac{23}{3}y = 92$$

$$y = 12$$

$$x = \frac{2y-3}{3} = \frac{2(12)-3}{3}$$

$$m\angle B = x + 4y + 2 \quad x = 7$$

$$= 7 + 4(12) + 2$$

$$= 57$$