

Chapter 8.3

15 - 23

SKIP 16, 20, 21

15a) There are 2 ways to solve this problem.

$$8 + 7(4+x) = 57$$

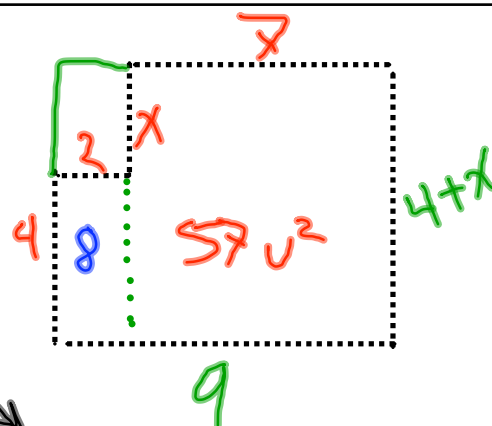
$$8 + 28 + 7x = 57$$

$$\begin{array}{r} 36 + 7x = 57 \\ -36 \quad -36 \\ \hline \end{array}$$

$$\frac{7x}{7} = \frac{21}{7}$$

$$x = 3$$

both ways are correct.



$$9(4+x) - 2x = 57$$

$$36 + 9x - 2x = 57$$

$$\begin{array}{r} 36 + 7x = 57 \\ -36 \quad -36 \\ \hline \end{array}$$

$$7x = 21$$

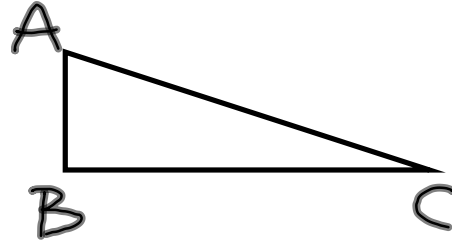
$$x = 3$$

17)

$$\angle A = (12x + 5)^\circ$$

$$\angle B = (9x + 15)^\circ$$

$$\angle C = (2x - 1)^\circ$$



$$(12x + 5) + (9x + 15) + (2x - 1) = 180$$

$$\underline{12x + 5} + \underline{9x + 15} + \underline{2x - 1} = 180$$

$$23x + 19 = 180$$

$$\begin{array}{r} 23x + 19 = 180 \\ -19 \quad -19 \\ \hline 23x = 161 \\ \underline{23} \end{array}$$

$$x = 7$$

18)

$$a) \quad x + 0.06x = 25.97$$

original
cost + amount of
tax on
beer wax = total
cost