

$$5. 9n + 7 = 3(n + 7) + 3(2n + 4)$$

$$9n + 7 = 3n + 21 + 6n + 12$$

$$9n + 7 = 9n + 33$$

$$7 = 33$$

NO solution

$$6. \textcircled{a} 20 = x + (x + 4)$$

$$20 = 2x + 4$$

$$16 = 2x$$

$$x = 8 \text{ years old}$$

Stanley is 8 years old
Camellia is 12 years old

$$7. 2ab - c = 8$$

$$+c \quad +c$$

$$\frac{2ab}{2b} = \frac{8+c}{2b}$$

$$a = \frac{8+c}{2b}$$

$$8. y + 1 = \frac{1}{2}(x - 8)$$

$$y + 1 = \frac{1}{2}x - 4$$

$$y = \frac{1}{2}x - 5$$

$$9. \textcircled{a} 30 \geq 4x + 3.5y$$

x = Bags of Popcorn

y = packages of candy

$$\textcircled{b} x = 3 \rightarrow 30 \geq 4(3) + 3.5y$$

$$30 \geq 12 + 3.5y$$

$$18 \geq 3.5y$$

$$y \leq 5.143$$

at most 5 packages of candy

