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HW: green text p. 429 & 430

#5, 3, 5, 17-23 (odds)

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3.) Let $x = \text{small \#} = 6$ ^{ans} 17.) Let $x = \$ \text{pretzel} = \0.75 ^{ans}
 $y = \text{large \#} = 30$ $y = \$ \text{soda} = \0.50

$$\begin{array}{r} x + y = 36 \\ y - x = 24 \\ \hline 2y = 60 \\ y = 30 \\ x + y = 36 \\ x + 30 = 36 \\ -30 \quad -30 \\ \hline x = 6 \end{array}$$

$$\begin{array}{r} 3x + 1y = 2.75 \\ -(2x + 1y = 2) \\ \hline x = 0.75 \\ 2x + y = 2 \\ 2(0.75) + y = 2 \\ 1.50 + y = 2 \\ -1.5 \quad -1.5 \\ \hline y = 0.50 \end{array}$$

5.) Let $x = \text{small \#} = 35$ ^{ans} 19.) Let $x = \$ \text{bat} = \9 ^{ans}
 $y = \text{large \#} = 69$ $y = \$ \text{ball} = \4.50

$$\begin{array}{r} x + y = 104 \\ y = 2x - 1 \\ x + (2x - 1) = 104 \\ 3x - 1 = 104 \\ +1 \quad +1 \\ \hline 3x = 105 \\ \frac{3x}{3} = \frac{105}{3} \\ x = 35 \\ x + y = 104 \\ 35 + y = 104 \\ -35 \quad -35 \\ \hline y = 69 \end{array}$$

$$\begin{array}{r} -3(4x + 9y = 76.50) \\ 4(3x + 12y = 81) \\ \hline -12x - 27y = -229.5 \\ 12x + 48y = 324 \\ \hline 21y = 94.5 \\ \frac{21y}{21} = \frac{94.5}{21} \\ y = 4.50 \\ 3x + 12(4.50) = 81 \\ 3x + 54 = 81 \\ -54 \quad -54 \\ \hline 3x = 27 \quad x = 9 \\ \frac{3x}{3} = \frac{27}{3} \end{array}$$

21.) Let

$$x = \text{\$ brown rice} = \text{\$}2.50$$

$$y = \text{\$ basmati rice} = \text{\$}2.90$$

$$2(4x + 3y = 18.70)$$

$$3(3x + 2y = 13.30)$$

$$8x + 6y = 37.4$$

$$-9x - 6y = -39.9$$

$$-x = -2.5$$

$$x = \text{\$}2.50$$

$$3x + 2y = 13.30$$

$$3(2.5) + 2y = 13.30$$

$$7.5 + 2y = 13.30$$

$$-7.5 \quad -7.5$$

$$2y = 5.8$$

$$y = \text{\$}2.90$$

23.) Let

$$x = \text{\$}33 \text{ racquets}$$

$$y = \text{\$}18 \text{ racquets}$$

$$-18(x + y = 200)$$

$$33x + 18y = 4800$$

$$-18x - 18y = 3600$$

$$33x + 18y = 4800$$

$$15x = 1200$$

$$15 \quad 15$$

$$x = 80$$

Sold 120 $\text{\$}18$ racquets