

4.3

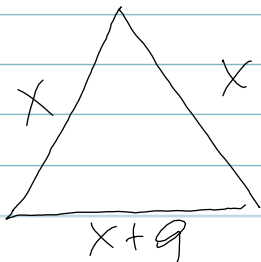
#17
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tablets	T	$2(7T + 4P = \$6.40)$
pens	P	$-7(2T + 19P = \$5.40)$

$$\begin{array}{r} 14T + 8P = 12.80 \\ -14T + 133P = -37.80 \\ \hline -125P = -25 \\ P = \frac{-25}{-125} \\ P = 0.20 \end{array}$$

$$\begin{array}{l} 2T + 19P = 5.40 \\ 2T + 19(.2) = 5.40 \\ 2T + 3.8 = 5.40 \\ 2T = 1.60 \\ T = 0.80 \end{array}$$

#23



$$P = 93$$

$$x + x + x + 9 = 93$$

$$3x + 9 = 93$$

$$3x = 84$$

$$x = 28$$

28, 28, 37

#12

$$\begin{aligned}x &= \text{student} \\ y &= \text{non student}\end{aligned}$$

$$\begin{array}{l} \text{student} + \text{non student} \\ \text{ticket} \end{array} = 311$$

$$\begin{aligned}x + y &= 311 \\ 50x + 150y &= 38550\end{aligned}$$

$$y = 311 - x$$

⊗

$$\begin{aligned}50x + 150(311 - x) &= 38550 \\ 50x + 46650 - 150x &= 38550 \\ -100x &= -8100 \\ x &= 81\end{aligned}$$

$$\begin{aligned}x + y &= 311 \\ 81 + y &= 311 \\ y &= 230\end{aligned}$$

#8

$$5\% + 25\% = 20\%$$

$$\begin{aligned}x + y &= 500 \text{ ml} \\ .05x + .25y &= .20(500)\end{aligned}$$

$$\begin{array}{r} -x + y = 4 \\ x - y = -4 \\ \hline 0 = 0 \end{array}$$

Same line true
infinite solutions

$$\begin{array}{r} -x + y = 4 \\ x - y = 2 \\ \hline 0 = 6 \end{array}$$

parallel lines - false
no solution