

Conceptual

Unit 3 Quiz #2

1a.) Little Big Planet: $\begin{array}{r} 2 \quad 1 \quad 1 \\ 45.75 \end{array}$
 NBA 2K15: 49.50
 Minecraft: $+ 19.55$
 $\hline \$ 114.80$

equation:

$$\begin{array}{r} 114.80 = 100 + X \\ -100.00 \quad -100 \\ \hline \$ 14.80 = X \end{array}$$

No, he doesn't have enough.
 Dennis needs \$14.80 more.

b.) $3(19.55)$ then write equation

$$\begin{array}{r} 2 \quad 1 \quad 1 \\ 19.55 \\ \times \quad 3 \\ \hline 58.65 \\ \hline = 58.65 \end{array}$$

$100 - 58.65 = x$ or $58.65 + x = 100$	$x = \text{change for Dennis}$
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$x = \$41.35$

c.) try 3 cheapest games

$$\begin{array}{r} 2 \quad 1 \quad 1 \\ \text{LBP3} \quad 45.75 \\ \text{WWE} \quad 55.25 \\ \text{NBA} + 49.50 \\ \hline \$ 150.50 \end{array}$$

* any combination will be too much money

$$150.50 > 150$$

No, any three games (even the cheapest) will be too much money for Dennis

Method 1

X = total money left for kids

2. $\frac{X}{6} = 3.25$

Sidework:
$$\begin{array}{r} 3.25 \\ \times 6 \\ \hline 19.50 \end{array}$$

$6 \cdot \frac{X}{6} = 3.25 \cdot 6$

$X = \$19.50$ amount left by parents

equations
option

Method 2 - count kids first

$6(3.25)$ = amount of money left

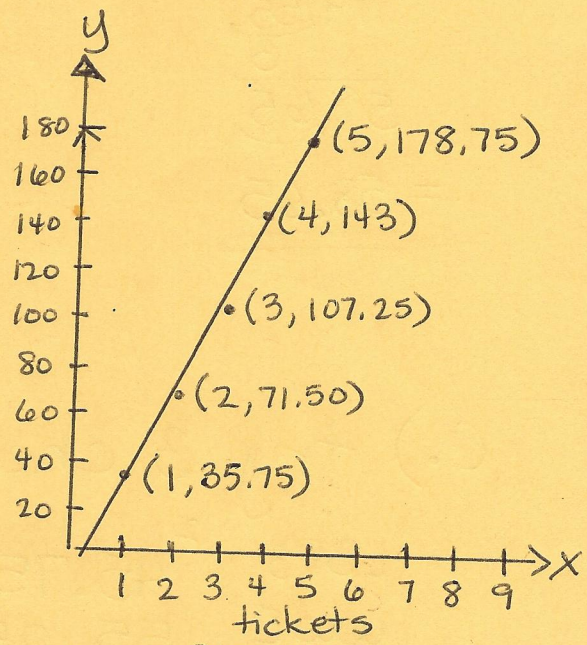
$6(3.25) = X$

3a.)

number of tickets	Cost(\$)
1	35.75
2	71.50
3	107.25
4	143.00
5	178.75

b.)

cost (\$)



c.) Cost = cost of each ticket $\cdot$ 35.75

t = number of tickets

equation $\Rightarrow$
$$\begin{array}{l} y = 35.75t \\ \text{or} \\ \text{Cost} = 35.75t \end{array}$$

x axis = tickets

y axis = cost

Problem 3 continued...

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3 d.) $y = 35.75x$
 $y = 35.75(8)$
 $y = 286$

$$\begin{array}{r} 4 \quad 6 \quad 4 \\ 35.75 \\ \times \quad 8 \\ \hline 286.00 \end{array}$$

Adam will pay \$286

e.) Adam can only buy 8 tickets because the graph or equation at 9 tickets is more than \$300.

$$y = 35.75(9)$$
$$y = \$321.75$$

$$\begin{array}{r} 5 \quad 6 \quad 4 \\ 35.75 \\ \times \quad 9 \\ \hline \$321.75 \end{array}$$