

1.) Let  $x = a\#$

$$\begin{array}{r} 3x + 5 = -12 \\ -5 \quad -5 \\ \hline \end{array}$$

$$\frac{3x}{3} = \frac{-17}{3}$$

$$x = -5\frac{2}{3}$$

ans: The # is  $-5\frac{2}{3}$ .

2.) Faith's  
 $\frac{\text{cost}}{\text{amount}} = \text{unit rate}$   
 $\frac{\$5.60}{70 \text{ oz}} = \$0.08/\text{oz}$

Eneida's  
 $\frac{\$2.25}{25 \text{ oz}} = \$0.09/\text{oz}$

answer: Faith's farm has the better price b/c it is a penny cheaper than Eneida's farm

3.) Let  $x = \$$  per ticket

$$\begin{array}{r} 4x + 8.20 = 524 \\ -8.20 \quad 8.20 \\ \hline \end{array}$$

$$\frac{4x}{4} = \frac{515.80}{4}$$

$$x = \$128.95$$

ans: Each ticket is \$128.95

4.)  $\frac{x+4}{3} = \frac{7}{2}$

cross mult then  
set them equal  
to solve for x

$$7(3) = 2(x+4)$$

$$21 = 2x + 8$$

$$\begin{array}{r} -8 \\ \hline 13 = 2x \end{array}$$

$$\frac{13}{2} = \frac{2x}{2}$$

$x = 6\frac{1}{2}$  or 6.5

5.)  $\frac{5n+1}{8} = \frac{1}{2}$

$$2(5n+1) = 8(1)$$

$$10n + 2 = 8$$

$$\begin{array}{r} -2 \\ \hline 10n = 6 \end{array}$$

$$\frac{10n}{10} = \frac{6}{10}$$

$n = 0.6$

4.)  $\frac{3x-2}{8} = \frac{5}{4}$

$$4(3x-2) = 8(5)$$

$$12x - 8 = 40$$

$$\begin{array}{r} +8 \\ \hline 12x = 48 \end{array}$$

$$\frac{12x}{12} = \frac{48}{12}$$

$x = 4$

7.)  $\frac{2m+3}{6} = \frac{m-9}{8}$

$$8(2m+3) = 6(m-9)$$

$$16m + 24 = 6m - 54$$

$$\begin{array}{r} -6m \\ \hline 10m + 24 = -54 \end{array}$$

$$\begin{array}{r} -24 \\ \hline 10m = -78 \end{array}$$

$$\frac{10m}{10} = \frac{-78}{10}$$

$m = -7.8$



\* f.) Jaidan

Distance (mi)	$\frac{1}{2}$	1	1.5	2	4	?
Time (h)	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1	2	

max

Distance (mi)	$\frac{1}{3}$	$\frac{2}{3}$	1	2	4	?
Time (h)	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{1}{2}$	1	2	

ans: They hiked 4 miles in 2 hrs

9.)  $-6 < x \leq 3$

Rewrite

$x > -6 \quad x \leq 3$



Solution set is -5, -4, -3, -2, -1, 0, 1, 2, &amp; 3.

10.) LCD 30  $\left[ \frac{2x + 1}{5} > \frac{1}{2}x \right]$

$12x + 5 > 15x$

$-12x \quad -12x$

$\frac{5}{3} > \frac{3x}{3}$

$1\frac{2}{3} > x$

$x < 1\frac{2}{3}$