**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per.\_\_\_\_\_\_\_ Score:\_\_\_\_\_**

**U1 HW #4** *Equations with Fractions*

**Directions:** Solve each equation. Show all work,

|  |  |
| --- | --- |
| 1. $\frac{1}{3}x-8=12+\frac{4}{3}x$
 | **2.**$ \frac{1}{4}\left(12x+16\right)=10-3(x-2)$ |
| **3.** $\frac{1}{2}\left(2n+6\right)=5n-12-n$ | **4.**$ \frac{1}{7}y+\frac{3}{4}y=7\frac{1}{7}$ |
| **5.**$ \frac{m}{3}-\frac{1}{2}=\frac{m}{2}-\frac{1}{3}$ | **6.** $\frac{y}{3}+5=\frac{y}{2}+3$ |
| **7.** $\frac{1}{3}n+\frac{3}{4}=\frac{5}{6}n-1$ | **8.** $\frac{3}{4}t-\frac{5}{4}=\frac{1}{3}t$ |
| **9.** $\frac{1}{2}d+\frac{3}{8}= -2d$ | **10.**$ \frac{(x-3)}{3}=\frac{(2x+4)}{5}$ |
| **11.** $\frac{x+3}{2}=\frac{x-1}{4}$ | **12.** $\frac{2x-9}{3}=8-3x$ |
| **13.** $\frac{x+1}{x-1}=\frac{2}{3}$ | **14.**$\frac{x+5}{3}=\frac{x-2}{4}$ |

**Directions:** Write the story that goes with the expressions and equation in each problem. Solve for the unknown information and interpret your answer.

**Story**

1. Fixing Your Car

Time (hours): $h$

Cost of Mike’s Mechanics: $15h+75$

Cost of Bubba’s Body Shop: $25h$

$$15h+75=25h$$

* 1. Write a story that matches the expressions and equations.
	2. Solve the equation in the space above.
	3. **Interpret your answer.** What does your answer mean in this situation?