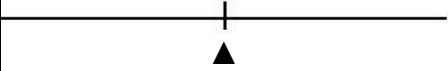
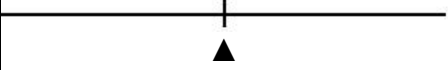
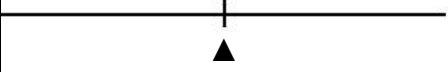
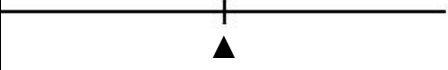
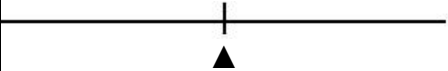

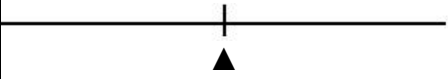
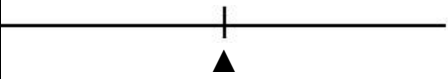

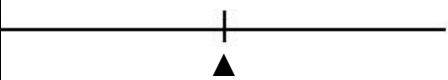
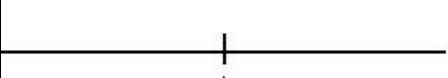



# Equivalent Equations With Counters and Balances

Name \_\_\_\_\_

<i>Sketch Model</i>	Original Equation	Operation and New Equation	Show Checking for Equivalency
1. 	$3 \cdot 2 = 1 + 5$	$3 \cdot 2 + 4 = 1 + 5 \text{ \_\_\_}$	$\begin{array}{r} 3 \cdot 2 = 1 + 5 \\ + 4 \quad + 4 \\ \hline 10 = ? \end{array}$
2. 	$3 + 2 = 5$	$3 + 2 \text{ \_\_\_} = 5 - 2$	$\begin{array}{r} 3 + 2 = 5 \\ - 2 \quad - 2 \\ \hline ? = ? \end{array}$
3. 	$\frac{8}{2} = 4$	$\frac{8}{2} + 3 = 4 \text{ \_\_\_\_\_\_}$	<p style="text-align: center;">?</p>
4. 	$-2 + -3 = -5$	$4(-2 + -3) = \text{\_\_\_} - 5$	<p style="text-align: center;">?</p>
5. 	$\frac{10}{2} - 3 = 2$	$\frac{10}{2} - 3 + 3 = 2 \text{ \_\_\_\_\_\_}$	<p style="text-align: center;">?</p>
6. 	$4(1 + 2) = 4(3)$	$4(1 + 2) = \frac{4(3)}{4}$	<p style="text-align: center;">?</p>

7. 	$X + 5 = 7$	$X + 5 - 5 = 7 \underline{\hspace{1cm}}$	$\underline{2} + 5 = 7$
8. 	$2 = t - 4$	$2 \underline{\hspace{1cm}} = t - 4 + 4$	$2 = \underline{\hspace{1cm}} - 4$
9. 	$P - (-2) = 7$	$P - (-2) + (-2) = 7 + \underline{\hspace{1cm}}$	$\underline{\hspace{1cm}} - (-2) = 7$
10. 	$2y = -8$	$\frac{2y}{2} = \frac{-8}{?}$	$2(\underline{\hspace{1cm}}) = -8$
11. 	$-3w = 12$	$\frac{-3w}{-3} = \frac{12}{?}$	?
12. 	$6 = \frac{r}{3}$	$6(\underline{\hspace{1cm}}) = \frac{r}{3} \cdot (3)$	$6 = \frac{?}{3}$

