

Name:	Class:
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Topic:	Date:
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Main Ideas/Questions	Notes	
One-Step Equations	1. $m + 12 = 10$	2. $-2 = g - 9$
	3. $-7y = -91$	4. $\frac{a}{9} = -4$
Fractions *To "get rid" of a fraction, multiply by the _____!	5. $\frac{2}{3}x = 10$	6. $\frac{4}{9}w = -8$
	7. $-\frac{6}{5}k = 12$	8. $-\frac{1}{2}m = -9$
Two-Step Equations	To Solve a Two-Step Equation: 1. Undo the Addition/Subtraction (to remove constant term) 2. Undo the Multiplication/Division (to remove coefficient)	
	9. $6x + 8 = 50$	10. $2x - 5 = 11$
	11. $13 = -4x + 9$	12. $7 - 3x = 34$
	13. $\frac{x}{2} - 7 = 9$	14. $11 = \frac{x}{-5} + 8$
	15. $\frac{3}{5}x + 22 = 28$	16. $-\frac{1}{3}x + 1 = -7$

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Main Ideas/Questions

Notes

One-Step
Equations

1. $m + 12 = 10$

$$\begin{array}{r} -12 \quad -12 \\ \hline m = -2 \end{array}$$

2. $-2 = g - 9$

$$\begin{array}{r} +9 \quad +9 \\ \hline 7 = g \end{array}$$

3. $-7y = -91$

$$\begin{array}{r} -7 \quad -7 \\ \hline y = 13 \end{array}$$

4. $\frac{a}{9} = -4(9)$

$$\begin{array}{r} a = -36 \\ \hline a = -36 \end{array}$$

Fractions

*To "get rid"
of a fraction,
multiply by the
reciprocal!

5. $\frac{2}{3}x = 10 \left(\frac{3}{2}\right)$

$$\begin{array}{r} x = 15 \\ \hline x = 15 \end{array}$$

6. $\frac{4}{9}w = -8 \left(\frac{9}{4}\right)$

$$\begin{array}{r} w = -18 \\ \hline w = -18 \end{array}$$

7. $\frac{6}{5}k = 12 \left(\frac{5}{6}\right)$

$$\begin{array}{r} k = -10 \\ \hline k = -10 \end{array}$$

8. $\frac{1}{2}m = -9 \left(-\frac{2}{1}\right)$

$$\begin{array}{r} m = 18 \\ \hline m = 18 \end{array}$$

Two-Step
Equations*To Solve a Two-Step Equation:*

1. Undo the **Addition/Subtraction** (to remove constant term)
2. Undo the **Multiplication/Division** (to remove coefficient)

9. $6x + 8 = 50$

$$\begin{array}{r} -8 \quad -8 \\ \hline 6x = 42 \\ \hline \frac{6x}{6} = \frac{42}{6} \\ \hline x = 7 \end{array}$$

10. $2x + 5 = 11$

$$\begin{array}{r} -5 \quad -5 \\ \hline 2x = 6 \\ \hline \frac{2x}{2} = \frac{6}{2} \\ \hline x = 3 \end{array}$$

11. $13 = -4x + 9$

$$\begin{array}{r} -9 \quad -9 \\ \hline 4 = -4x \\ \hline -4 \quad -4 \\ \hline -1 = x \end{array}$$

12. $7 - 3x = 34$

$$\begin{array}{r} -7 \quad -7 \\ \hline -3x = 27 \\ \hline -3 \quad -3 \\ \hline x = -9 \end{array}$$

13. $\frac{x}{2} + 7 = 9$

$$\begin{array}{r} +7 \quad +7 \\ \hline \frac{x}{2} = 2 \\ \hline (-2) \frac{x}{2} = (-2) 2 \\ \hline x = -4 \end{array}$$

14. $11 = \frac{x}{-5} + 8$

$$\begin{array}{r} -8 \quad -8 \\ \hline \frac{x}{-5} = 3 \\ \hline (-5) \frac{x}{-5} = (-5) 3 \\ \hline x = -15 \end{array}$$

15. $\frac{3}{5}x + 22 = 28$

$$\begin{array}{r} -22 \quad -22 \\ \hline \frac{3}{5}x = 6 \\ \hline \left(\frac{5}{3}\right) \frac{3}{5}x = \left(\frac{5}{3}\right) 6 \\ \hline x = 10 \end{array}$$

16. $-\frac{1}{3}x + 1 = -7$

$$\begin{array}{r} -1 \quad -1 \\ \hline -\frac{1}{3}x = -8 \\ \hline \left(-\frac{3}{1}\right) \left(-\frac{1}{3}\right)x = \left(-\frac{3}{1}\right) (-8) \\ \hline x = 24 \end{array}$$