

Solving Two Step Equations

$$\textcircled{1} \quad 3x + 6 = 20$$

$$\begin{array}{r} 3x + 6 = 20 \\ \underline{+6 \quad +6} \\ 3x = 26 \end{array}$$

$$\frac{3x}{3} = \frac{26}{3}$$

$$x = \frac{26}{3} \text{ or } 8\frac{2}{3}$$

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$$\textcircled{2} \quad 15 + 6a = -7$$

$$\begin{array}{r} 15 + 6a = -7 \\ \underline{+15 \quad +15} \\ 6a = -22 \end{array}$$

$$\frac{6a}{6} = \frac{-22}{6}$$

$$a = \frac{11}{3} \text{ or } 3\frac{2}{3}$$

$$\textcircled{3} \quad 28 = -4 + \frac{x}{9}$$

$$\begin{array}{r} 28 = -4 + \frac{x}{9} \\ \underline{+4 \quad +4} \\ -9 \cdot 32 = -\frac{x}{9} \cdot -9 \end{array}$$

$$x = -288$$

$$\textcircled{4} \quad 6l - 5 = -6 \cdot 8$$

$$\begin{array}{r} 6l - 5 = -48 \\ \underline{+5 \quad +5} \\ 6l = -43 \end{array}$$

$$\frac{6l}{6} = \frac{-43}{6}$$

$$l = -\frac{43}{6} \text{ or } -7\frac{1}{6}$$

$$\textcircled{5} \quad \frac{3}{5}x + 8 = 10$$

$$\begin{array}{r} \frac{3}{5}x + 8 = 10 \\ \underline{\frac{8}{3} \cdot \frac{3}{5} \quad \frac{8}{3} \cdot \frac{3}{5}} \\ \frac{18}{5}x = \frac{18}{5} \cdot \frac{5}{3} \end{array}$$

$$x = 30$$

Multiply by the reciprocal

Did You Hear About . . .

*All work has to be completed on notebook paper shown as demonstrated!



1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	???

Equations and Problems: Solving Multi-Step Equations With Like Terms

Answers 1-9

$-\frac{2}{5}$ • WHO

-92 • TRIED

$-3\frac{1}{3}$ • BRAIN

32 • FROM

$7\frac{1}{2}$ • THE

$-2\frac{5}{6}$ • SLEEP

-100 • WOKE

28 • DREAMING

$-1\frac{1}{4}$ • GUY

$5\frac{2}{3}$ • HIS

$4\frac{1}{4}$ • SURGERY

75 • UP

$3\frac{1}{2}$ • TRANSPLANT



Solve each equation or problem. Write the word next to the correct answer in the box that contains the exercise number.



1 $2n + 5 = 20$

2 $8y - 3 = -13$

3 $12 - 5b = 14$

4 $\frac{1}{4}m + 9 = -16$

5 $2 - \frac{x}{15} = -3$

6 $\frac{5}{8}a - 27 = -7$

7 $3x - 11 = 6$

8 $32 = -8 - 12y$

9 $-10 = -12 + \frac{4}{7}n$

10 $36 = 30 - \frac{k}{16}$

11 $\frac{d + 8}{3} = -14$

12 $\frac{8}{5}p + 6 = 30$

13 $\frac{4m - 7}{2} = 18$

14 $10 + \frac{2}{3}x = 0$

15 $5 = \frac{15 - 24a}{6}$

16 $37 = \frac{2}{3}x - 1$

17 $\frac{m - 15}{7} = 7$

Answers 10-17

-90 • MISSING

$10\frac{3}{4}$ • HE

$-\frac{5}{8}$ • CHANGED

$-\frac{1}{4}$ • DECIDED

-96 • OPERATION

64 ml • MIND

-48 • WITH

15 • SAID

62 ml • INTO

-15 • HAD

57 ml • HIS

72 ml • SKULL

-50 • AND

PUNCHLINE • Algebra • Book A