

P. 353

Solving Multi-Step Equations ^{nn.2}

4. $2y - 5 = 9 + 5$

$$\frac{2y}{2} = \frac{14}{2}$$

$$y = 7$$

6. $3m + 7 = 19 - 7$

$$\frac{3m}{3} = \frac{12}{3}$$

$$m = 4$$

8. $4y - 9y = 35$

$$\frac{-5y}{-5} = \frac{35}{-5}$$

$$y = -7$$

10. $6n + 3n = -18$

$$\frac{9n}{9} = \frac{-18}{9}$$

$$n = -2$$

12. $3t + 7t = -30$

$$\frac{10t}{10} = \frac{-30}{10}$$

$$t = -3$$

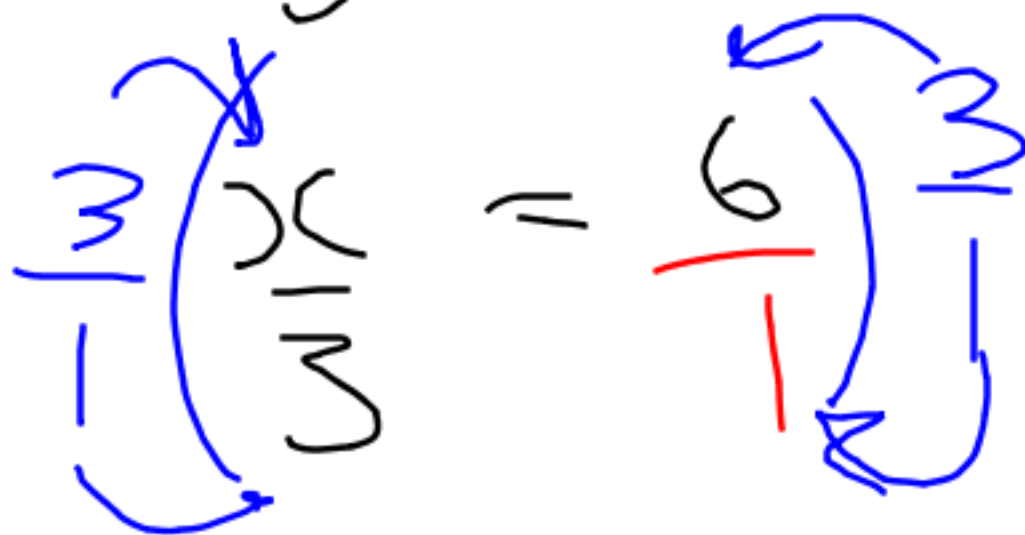
17. $3 + m = -7 - 3$
 $m = -10$

L.S.	R.S.
$3t + 7t$	-30
$3(-3) + 7(-3)$	
$-9 - 21$	
-30	
$3 + m$	-7
$3 + -10$	-7
-7	

✓

19.

$$\frac{x}{3} = 4 + 2$$

$$\frac{x}{3} = 1$$


$$\frac{3x}{3} = \frac{18}{1}$$

$$x = 18$$

L.S.

$$\frac{x}{3}$$

$$= \frac{18}{3}$$

$$= 6$$

R.S.

$$4 + 2$$

$$= 6$$



23. $4 + \frac{x}{3} = -7 - 4$

$\frac{x}{3} = -11$

$x = -33$

L.S. R.S.

$4 + \frac{x}{3}$

$4 + \frac{-33}{3}$

$4 + (-11)$

-7

25.

$$\frac{x}{4} - \frac{1}{4} = -\frac{3}{4}$$

$$x - 1 = -3$$

$$x = -2$$

L.S.

$$\frac{x}{4} - \frac{1}{4}$$

$$-\frac{2}{4} - \frac{1}{4}$$

$$-\frac{3}{4}$$

R.S.

$$-\frac{3}{4}$$

26.

$$\begin{array}{rcl}
 y^{x^2} + \frac{1}{4} = \frac{3}{4} & \xrightarrow{\text{L.S.}} & \frac{1}{2} + \frac{1}{4} \\
 2^{x^2} & & \\
 2y + 1 = 3 & & \\
 \frac{2y}{2} = \frac{2}{2} & & \frac{\frac{1}{2}x^2}{2^{x^2}} + \frac{1}{4} \\
 y = 1 & & \frac{2}{4} + \frac{1}{4} \\
 & & \frac{3}{4}
 \end{array}$$

R.S.

28.

$$2y - 5y - 5 = 13$$

$$-3y - 5 = 13 + 5$$

$$-3y = 18$$

$$-3 \quad -3$$

$$y = -6$$

L.S.

R.S.

$$2y - 5y - 5 = 13$$

$$2(-6) - 5(-6) - 5$$

$$-12 + 30 - 5$$

$$18 - 5$$

$$13$$

33.

$$4 + 3t = -6 - 2$$

$$4 + 3t = -8 - 4$$

$$\frac{3t}{3} = \frac{-12}{3}$$

$$t = -4$$

L.S.	R.S.
$4 + 3t$	$-6 - 2$
$4 + 3(-4)$	-8
$4 + -12$	
-8	✓

$$35. \quad 5n + 3n - 2n = 17 - 2 + 9$$

$$\frac{6n}{6} = \frac{24}{6}$$

$$n = 4$$

L.S.

$$\begin{aligned}
 & 5n + 3n - 2n && 17 - 2 + 9 \\
 = & 5(4) + 3(4) - 2(4) && = 24 \\
 = & 20 + 12 - 8 && \\
 = & 24 &&
 \end{aligned}$$

$$42. \quad 5t - 2.1 = 8.9 + 2.1$$

$$\frac{5t}{5} = \frac{11}{5}$$

$$t = 2.2$$

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