

Linear Equations

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Section 1

- (1) $2x = 24$
- (2) $24 = 2x$
- (3) $2x = -24$
- (4) $-2x = 24$
- (5) $-2x = -24$

Section 2

- (1) $\frac{x}{4} = 2$
- (2) $2 = \frac{x}{4}$
- (3) $\frac{x}{4} = -2$
- (4) $\frac{-x}{4} = 2$
- (5) $-\frac{x}{4} = -2$

Section 3

- (1) $2x + 1 = 15$
- (2) $2x - 1 = 15$
- (3) $15 = 2x - 1$
- (3) $2x - 1 = -15$
- (4) $1 - 2x = 15$
- (5) $1 - 2x = -15$

Section 4

- (1) $\frac{x}{3} - 1 = 5$

- (2) $\frac{x}{3} + 1 = 5$

- (3) $5 = \frac{x}{3} + 1$

- (4) $5 = 1 - \frac{x}{3}$

Section 5

- (1) $3(x - 1) = 12$
- (2) $3(x + 1) = 12$
- (3) $3(x + 1) = -12$
- (4) $12 = 3(x - 2)$
- (5) $-3(x - 2) = 12$
- (6) $3(x + 2) = -12$
- (7) $-3(x - 2) = -12$

Section 6

- (1) $5y = 2y + 15$
- (2) $5y = 15 + 2y$
- (3) $2y + 15 = 5y$
- (4) $2y - 15 = 5y$
- (5) $5y = -15 + 2y$
- (6) $15 - 2y = 5y$
- (7) $-15 + 2y = -5y$
- (8) $2y = -5y + 15$

Section 7

- (1) $3y + 1 = 2y + 4$
- (2) $3y - 1 = 2y + 4$
- (3) $3y + 1 = 2y - 4$
- (4) $3y - 1 = 2y - 4$
- (5) $2y - 4 = 3y + 1$
- (6) $4 + 2y = 3y + 1$

Section 8

- (1) $4y + 1 = 2y + 7$
- (2) $4y - 1 = 2y + 7$
- (3) $2y + 7 = 4y - 1$
- (4) $2y - 7 = 4y - 1$
- (5) $7 - 2y = 4y + 1$
- (6) $7 - 2y = 1 - 4y$
- (7) $-7 + 2y = -4y - 1$

Section 9

- (1) $3(x + 1) = 6(x - 1)$
- (2) $3(x - 1) = 6(x + 1)$
- (3) $3(1 - x) = 3(x - 1)$
- (4) $3(2x + 1) = 3(x - 1)$
- (5) $6(2x + 1) = 3(x - 1)$
- (6) $5(2x + 1) = 3(1 - x)$
- (7) $7(2x + 1) = -2(1 - x)$

Section 10

- (1) $\frac{2p}{3} + 1 = \frac{p}{3} + 4$
- (2) $\frac{2p}{3} - 1 = \frac{p}{3} + 4$
- (3) $\frac{p}{3} + 1 = \frac{2p}{3} - 4$
- (4) $1 - \frac{p}{3} = \frac{2p}{3} - 4$
- (5) $\frac{5p}{3} + 1 = \frac{p}{3} + 5$
- (6) $\frac{5p}{3} + 1 = 5 - \frac{p}{3}$

Section 11

- (1) $0.8q + 1 = 0.5q + 3$
- (2) $0.8q - 1 = 0.5q + 3$
- (3) $0.8q - 1 = 3 - 0.5q$
- (4) $1 - 0.8q = 3 - 0.5q$

Section 12

- (1) $\frac{2x - 1}{5} = 3x + 1$
- (2) $\frac{1 - 2x}{5} = 3x + 1$
- (3) $2x - 1 = \frac{3x + 1}{5}$

Section 13

- (1) $\frac{2x - 1}{2} = \frac{3x + 1}{5}$
- (2) $\frac{2x - 1}{3} = \frac{3x + 1}{5}$
- (3) $\frac{1}{2}(3x + 1) = \frac{1}{5}(2x - 1)$
- (4) $\frac{1}{5}(3x - 1) = \frac{1}{2}(2x + 1)$
- (5) $\frac{1}{4}(3x - 1) = \frac{1}{3}(2x + 1)$

Section 14

- (1) $\frac{2}{5} = \frac{3x + 1}{2x}$
- (2) $\frac{3y - 1}{5y} = \frac{7}{2}$