

Math Sheet

Name _____ Score _____ / 10 Teacher _____ Date _____

One-Step Decimal Equations

Solve each equation. Check your exact answer by substitution.

1. $r + 4 = 9.3$

6. $5.4q = 10.8$

2. $8.6 = \frac{d}{-0.5}$

7. $-3.4 = \frac{y}{-0.5}$

3. $18.6 = 6.2p$

8. $7.7b = 53.9$

4. $n + 5.2 = 7.3$

9. $6.5 = q - 1.5$

5. $-11.3 = k - 4.6$

10. $g + 7.9 = -0.5$

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One-Step Decimal Equations

Answer Key

Solve each equation. Check your exact answer by substitution.

1. $r + 4 = 9.3$

$$r = 5.3$$

Exact value. Move constants by doing the same operation to both sides.

$$5.3 + 4 = 9.3$$

Substitute the exact value into the original equation.

2. $8.6 = \frac{d}{-0.5}$

$$8.6 = -2d$$

Rewrite each side in equivalent affine form, distributing and collecting when needed.

$$2d + 8.6 = 0$$

Move variable terms by doing the same operation to both sides.

$$2d = -8.6$$

Move constants by doing the same operation to both sides.

$$d = -4.3$$

Exact value. Divide both sides by the nonzero coefficient.

$$8.6 = \frac{-4.3}{-0.5}$$

Substitute the exact value into the original equation.

3. $18.6 = 6.2p$

$$-6.2p + 18.6 = 0$$

Move variable terms by doing the same operation to both sides.

$$-6.2p = -18.6$$

Move constants by doing the same operation to both sides.

$$p = 3$$

Exact value. Divide both sides by the nonzero coefficient.

$$18.6 = 6.2 \times 3$$

Substitute the exact value into the original equation.

4. $n + 5.2 = 7.3$

$$n = 2.1$$

Exact value. Move constants by doing the same operation to both sides.

$$2.1 + 5.2 = 7.3$$

Substitute the exact value into the original equation.

5. $-11.3 = k - 4.6$

$$-1k - 11.3 = -4.6$$

Move variable terms by doing the same operation to both sides.

$$-1k = 6.7$$

Move constants by doing the same operation to both sides.

$$k = -6.7$$

Exact value. Divide both sides by the nonzero coefficient.

$$-11.3 = -6.7 - 4.6$$

Substitute the exact value into the original equation.

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One-Step Decimal Equations

Answer Key

Solve each equation. Check your exact answer by substitution.

6. $5.4q = 10.8$

$$q = 2$$

Exact value. Divide both sides by the nonzero coefficient.

$$5.4 \times 2 = 10.8$$

Substitute the exact value into the original equation.

7. $-3.4 = \frac{y}{-0.5}$

$$-3.4 = -2y$$

Rewrite each side in equivalent affine form, distributing and collecting when needed.

$$2y - 3.4 = 0$$

Move variable terms by doing the same operation to both sides.

$$2y = 3.4$$

Move constants by doing the same operation to both sides.

$$y = 1.7$$

Exact value. Divide both sides by the nonzero coefficient.

$$-3.4 = \frac{1.7}{-0.5}$$

Substitute the exact value into the original equation.

8. $7.7b = 53.9$

$$b = 7$$

Exact value. Divide both sides by the nonzero coefficient.

$$7.7 \times 7 = 53.9$$

Substitute the exact value into the original equation.

9. $6.5 = q - 1.5$

$$-1q + 6.5 = -1.5$$

Move variable terms by doing the same operation to both sides.

$$-1q = -8$$

Move constants by doing the same operation to both sides.

$$q = 8$$

Exact value. Divide both sides by the nonzero coefficient.

$$6.5 = 8 - 1.5$$

Substitute the exact value into the original equation.

10. $g + 7.9 = -0.5$

$$g = -8.4$$

Exact value. Move constants by doing the same operation to both sides.

$$-8.4 + 7.9 = -0.5$$

Substitute the exact value into the original equation.