

Reteaching Page

3.10 Solving Decimal Equations

Solving equations with decimals uses the same process as the other algebra that you have studied this year. If you find, after this review, that you are having difficulties, go to the algebra section @ Math6.org and review the processes.

Step 1 – Get the variable alone **using inverse operations**.

Step 2 – Use substitution to check your answer.

$$n + 3.6 = 9.4 \quad \text{The inverse of } +3.6 \text{ is } -3.6 \text{ (subtract 3.6 from both sides)}$$

$$n + 3.6 - 3.6 = 9.4 - 3.6$$

$$n = 5.8$$

$$5.8 + 3.6 = 9.4 \quad \text{Check with substitution.}$$

$$4n = 3.2 \quad \text{The inverse of } *4 \text{ is } \div 4 \text{ (divide both sides by 4)}$$

$$4n \div 4 = 3.2 \div 4$$

$$n = 0.8$$

$$4 * 0.8 = 3.2 \quad \text{Check with substitution.}$$

$$n \div 9 = 1.4 \quad \text{The inverse of } \div 9 \text{ is } * 9 \text{ (multiply both sides by 9)}$$

$$n \div 9 * 9 = 1.4 * 9$$

$$n = 12.6$$

$$12.6 \div 9 = 1.4 \quad \text{Check with substitution.}$$

Use inverse operations to solve each of the following. Then check with substitution.

_____ 1) $3.7 + n = 7.5$

_____ 2) $n - 4.2 = 11$

_____ 3) $6n = 4.2$

_____ 4) $n \div 7 = 3.1$