

## Lesson 1-4: Solving Equations with the Variable on each side

1) Solve  $6 + 3t = 8t - 14$

$$6 + 3t = 8t - 14 \quad \text{Given equation}$$
$$- \quad = -$$

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$$6 = -14$$
$$+ \quad = +$$

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$$20 = 5t$$

$$= t$$

2) Solve  $6(3a + 1) - 30 = 3(2a - 4)$

$$6(3a + 1) - 30 = 3(2a - 4) \quad \text{Given equation}$$

$$6( \quad ) + 6( \quad ) - 30 = 3( \quad ) - 3( \quad ) \quad \text{Distributive Property,}$$

$$+ 6 \quad - 30 = \quad - 12 \quad \text{Simplify}$$

$$18a - 24 = 6a - 12$$

$$- \quad = -$$

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$$- 24 = - 12$$

$$+ \quad = +$$

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$$12a =$$

$$a =$$