Review Lesson 2

NAME:

Solving Literal Equations

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Start by navigating to the Online Lesson for instructions.

Objective

⊘ Solve a formula for the indicated variable.

Introduced in:

Algebra 1: Principles of Secondary Mathematics

Lesson 2A

A Solving Literal Equations

Fill in the notes as you watch the video in the Online Lesson.

| When you solve an equation in terms of a variable, you are | that variable |
|------------------------------------------------------------|---------------|
| by moving terms to the other side of the equation | on. |

$$lue{}$$
 Solving the equation _____ means isolating x in the equation.

| operations are used to isolate the variable indicated. (i.e., The square of |
|-----------------------------------------------------------------------------|
| a term and the square root of a term are inverse operations.) |

Example 1

(b) Complete the example as you watch the video in the Online Lesson.

Solve the equation for b.

$$\frac{m-a+b}{5} = 3c$$

Example 2

(Example as you watch the video in the Online Lesson.

Solve for the indicated variable.

$$\frac{1}{3}(2R-r)=x;R$$

Practice

For problems 1–2, solve for t.

$$1) \quad R = \frac{pt}{A}$$

2)
$$v = v_0 + at$$

For problems 3–4, use the equation $k=\frac{1}{2}mv^2$. Recall, the inverse of squaring a term is taking the square root.

3) Solve for m.

4) Solve for v.

Solve for the indicated variable.

5)
$$Ax + By = C; y$$

6)
$$y = m(x - x_1) + y_1; x$$

For problems 7–8, solve for h.

7)
$$S = 2\pi rh + 2\pi r^2$$

8)
$$V = \frac{\pi}{3}h(r^2 + rR + R^2)$$

Solve for the indicated variable.

$$9) \quad F = G\left(\frac{m_1 m_2}{r^2}\right); \ r$$

$$10) \quad T = 2\pi \sqrt{\frac{m}{k}} \; ; m$$

11)
$$S = 2lw + 2lh + 2wh$$
; w

12)
$$y = a(x-h)^2 + k$$
; x

To continue, return to the Online Lesson.