Exercise 58

For the following exercises, consider this scenario: There is a mound of g pounds of gravel in a quarry. Throughout the day, 400 pounds of gravel is added to the mound. Two orders of 600 pounds are sold and the gravel is removed from the mound. At the end of the day, the mound has 1,200 pounds of gravel.

Solve for g.

Solution

Write the equation involving g.
$$g + 400 - 2(600) = 1200$$

Multiply 2 and 600.
$$g + 400 - 1200 = 1200$$

Combine like terms.
$$g - 800 = 1200$$

Add 800 to both sides.
$$g = 1200 + 800$$

Therefore,
$$g = 2000.$$