

**Chapter****1****Practice Quiz**

Lessons 1.3 and 1.4

Solve the equation. Remember, you can get exactly one solution, “no solution” or “infinitely many”.

1.  $2(x + 4) = -5x + 1$

2.  $7t + 3 = 8 + 7t$

3.  $\frac{1}{4}(4r - 8) = r - 2$

4.  $8.3z = 4.1z + 10.5$

Solve the equation for  $y$ .

5.  $6x - 3y = 9$

6.  $8 = 2y - 10x$

7. Volume of a cylinder:  $V = \pi r^2 h$

Solve the formula for the height  $h$ .

8. Area of a trapezoid:  $A = \frac{1}{2}h(b + B)$

Solve the formula for the base length  $b$ .

9. Container A has 300 L of water and is being filled at a rate of 5 liters per minute. Container B has 500 L of water and is being drained at a rate of 3 liters per minute. Write and solve an equation to determine the number of minutes,  $m$ , it will take for the two containers to have the same amount of water.
10. Max's Movie Club charges a \$39 membership fee and \$2 per movie rental. Vanessa's Video Club charges a \$12 membership fee and \$5 per movie rental. Write and solve an equation to find the number of movies you would need to rent in order for the cost of each club to be the same.