Practice 3-8

Types of Solutions of Linear Equations

Show whether each equation has one solution, infinitely many solutions, or no solution. Justify your answer.

1.
$$8c = 6 + 5c$$

2.
$$2x + 7 = -8x - 9 + 10x$$

3.
$$-2(b-4) = -2b + 8$$

4.
$$0.6(2h-4) = 2.4 + 1.2h$$

5.
$$-6a - 15 = -3(a - 7)$$

6.
$$\frac{1}{2}(4z + \frac{1}{4}) = 2(z + \frac{1}{16})$$

7.
$$3 - 7t = -5t + 3 - 2t$$

8.
$$-3x + 6 = -3(x + 3)$$

9.
$$4(0.8g + 1.5) = 2(3 + 1.6g)$$

10.
$$1 + \frac{2}{3}w + \frac{1}{2} = 2w$$

- **11.** One restaurant offers two large pizzas for the same price as two medium pizzas and a \$6 pitcher of drinks. The medium pizza costs \$3 less than the large pizza. How much could a large pizza cost? Justify your answer.
- **12.** Four less than a number equals four times the sum of a number and 2. Is this statement true for only one number, for all numbers, or for no numbers? Explain your reasoning.

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