Name _____ Class _____ Date _____

# Practice 2-4

**Variables and Equations**

**Is the given number a solution of the equation?**

**1.** $9k = 10 - k; -1$ _____

**2.** $-7r - 15 = -2r; -3$ _____

**3.** $3g \div (-6) = 5 - g; -10$ _____

**4.** $-3p = 4p + 35; -5$ _____

**5.** $8 - e = 2e - 16; 8$ _____

**6.** $5 - 15s = 8 - 16s; 3$ _____

**7.** $2(x - 2) - 5x = 5(2 - x); 7$ _____

**8.** $6a + 3 = 3(3a - 2); 4$ _____

**State whether each equation is *true*, *false*, or an *open sentence*.**

**9.** $14 = x - 9$

_____

**10.** $8 + 7 = 10$

_____

**11.** $4 - 15 = 22 - 33$

_____

**12.** $5 + x = 90 \div 9 + 4$

_____

**13.** $-7(5 - 9) = 19 - 3(-3)$

_____

**14.** $6(5 - 8) = 2(10 - 1)$

_____

**Write an equation for each sentence. State whether the equation is *true*, *false*, or an *open sentence*.**

**15.** One fifth of a number $n$ is equal to $-7$.

_____

**16.** The product of 13 and $-7$ is $-91$.

_____

**17.** Fifty-four divided by six equals negative nine.

_____

**18.** Seven less than the product of a number $z$ and 3 is equal to 4.

_____

**Write an equation. Is the given value a solution?**

**19.** A truck driver drove 468 miles on Tuesday. That was 132 miles farther than she drove on Monday. Let $d$ represent the distance she drove on Monday. Did she drive 600 miles on Monday?

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