

**Classify each equation as one of the following:**

- a) A variable expression equal to a numeric expression
- b) A variable expression equal to a variable expression
- c) A numeric expression equal to a variable expression
- d) A numeric expression equal to a numeric expression

1)  $2 + 8 = 10$

2)  $6x + 2 = 14$

3)  $5 = x - 3$

4)  $5a + 1 = 2a + 7$

5)  $x = 1 + 5$

6)  $5 + a = 2a - 1$

**Is -4 a solution of each equation? Explain why or why not.**

7)  $\frac{x}{8} = \frac{1}{2}$

8)  $2x - 6 = -14$

9)  $16 \div 2y = 2$

**Is -5 a solution of each equation? Explain why or why not.**

10)  $\frac{20}{x} = -4$

11)  $3x - 15 = 0$

12)  $\frac{50}{x} = -10$

### *Answer Key*

- 1) d
- 2) a
- 3) c
- 4) b
- 5) a
- 6) b
- 7) no
- 8) yes
- 9) no
- 10) yes
- 11) no
- 12) yes