IS 259 Name:

Class: Date:

**Expressions Test Review (Test Thursday January 29)**

1) **Write an expression** for the perimeter of the rectangle below.

|  |  |
| --- | --- |
|  | **Show work:****Answer:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**MULTIPLE CHOICE:** Circle the best answer AND write the letter next to the number.  **Show work below.**

2) Simplify the expression: 4(5p + 7y)

A. 5p + 28y B. 20p + 28y C. 48py D. 20p + 7y

3) Simplify the expression: (5y + p) + 10y

A. 15y + p B. 5y + p + 10y C. 15y2 + p D. 5yp + 10y

4) Write an equivalent expression for: -5 + 7y + 10

A. -5 + 7y B. 7y + 5 C. 15 + 7y D. -15 + 7y

5) Simplify by combining like terms: -6a – 8a + 4 + 2a – 1

A. -2a + 3 B. -16a + 3 C. -12a -3 D. -12a + 3

6) Simplify the expression by combining like terms: 8(y – 2) + 6y + 2

A. 14y B. 0 C. 14y + 16 D. 14y - 14

7) Write an expression to find the area of a rectangle with a length of 2x + 6 and a width of 10.

A. 20x + 60 B. 4x + 32 C. 20x + 6 D. 4x + 26

8) A tennis racket costs $20 and a tennis ball costs $2. Susan bought a tennis racket and some tennis balls. **Write an expression for the total** amount Susan spent. Choose *n* as the variable for the number of balls.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 20 + 2*n* | c. | *n*(20 + 2) |
| b. | 20*n* + 2 | d. | 20 + *n* |

9) Factor: 3w – 6

A. 3(w -2) B. 3(w -6) C. 3w(1-2) D. 3+ (w-2)

Write an algebraic expression for each:

10) Bob bought several books for $10 each and a game for $15. If he bought n books, write an expression for the total amount Bob spent.

11) Bob received $140 for Christmas. Each day he spent $10 on lunch. Write an expression to represent the money in dollars left with Bob after x days.

12) I weigh 10 pounds less than twice the amount Bob weighs. Write an expression to represent how much I weigh.

**Simplify each expression:**

**13)** -2p + 4(2p + - 2)

**14) 9x2** **+ 3x - 2.5** **+ 4x - 5x2 + 10**

**15)** 6p(3q + r) + 10q(3p + r) + 8r(3q + p)