**Chapter 5 & 6 Review Packet**

**Name:**  **Date:**

**Directions: Change the following equations from standard form to y=mx+b and find 5 terms of the given algebraic expression and graph them. (8 Points)**

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

1). 2(x) + (y) = -2

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

2). 3(x) + 4(y) = 16

**Directions: Find the X-intercept and the Y-Intercept for the following equations. (4 points)**

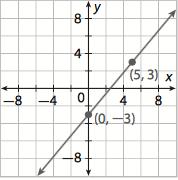
3). 6(x) + 2(y) = 10 4). -13(x) + 5(y) = 130

**Directions: Find the slope for the following problems. Identify and . (4 points)**

5). (-5, 3) and (-1, -4) 6). (15, 5) and (10, 1)

**Directions: Find an equation for each problem in the form of y = m(x) + b. (4 points)**

7). The slope is and (2,5) is on the line. 8). Passes through (4, 3) and (6, 9)

9).

**Directions: Find an equation for each problem in the form of . (4 points)**

10). Slope is 5 and (-3, 4) is on the line. 11). (2, 5) and (6, 15) is on the line.

12). A candle burned at a steady rate. After 32 minutes, the candle was 11.2 inches tall. Eighteen minutes later, it was 10.75 inches tall. Use the equation to find an algebraic expression and the height of the candle after 2 hours.

**Directions: Convert the following problems into the standard form equation of A(x) + B(y) = C. (4 points)**

13). Slope is 3 and (1, 4) is on the line. 14). (6, 11) and (5, 9) is on the line.

**Directions: Compare the following problem functions. (8 points)**

15). An experiment compares the heights of two plants over time. A plant was 5 cm tall at the beginning of the experiment and grew 0.3 centimeters each day. The function ƒ (t) represents the height of the plant (in centimeters) after t days. The graph shows the height of the second plant, g (t) (in centimeters), as a function of time t (in days). Find the rate of change g(t) and compare it to the rate of change for ƒ (t).