Pre-Calculus 10

**Practice Test**

1. What are the slope and y-intercept of each line?
2. y = -5x +6 b) 5x – 6y +12 = 0
3. Write the equation of the line with each slope and y-intercept. Explain your steps.
4. Slopey-intercept = 6 b) slope = 0, y-intercept = -6
5. State the intercepts of each line as ordered pairs. Then, write the equation of each line in standard form.
6. b)
7. What are the x-intercepts and y-intercepts of each line? Use the intercepts to sketch a graph of each line.
8. 5x – 2y – 20 = 0
9. y = 4
10. Use slope-point form to write an equation of a line through each point with the given slope. Express each answer in slope-intercept form and in standard form.
11. (-2, 1) and m = 4 b) (8, -3) and m =
12. Explain how you would use slope-point for to write and equation of a line through points (1, 10) and (3, 2). Then, express the equation in slope-intercept form and in standard form.
13. At higher altitudes, water boils at a lower temperature because the air pressure is lower. Suppose water boils at 96.5 °C at an altitudes of 1000m, and at 93.0 °C at an altitude of 2000m.
14. What is the slope of the line representing the data? What rate does the slope represent?
15. Write an equation of the line. Express your answer in slope-intercept form or in standard form.
16. Mountain climbers need to adjust their ingredients and cooking techniques when cooking at higher altitudes. What is the boiling temperature of water an elevation of 4000 m?
17. Write an equation of a line through (-1, 2) and parallel to y = -7. Explain your reasoning.
18. Write an equation of a line through (-6, 7) and perpendicular to 3x + 4y -12 = 0. Explain your reasoning.
19. How could you determine the equation of a line perpendicular to 2x + 5y +10 = 0 with the same x-intercept as 3x – 2y = 12?