**Math 2B Final REVIEW (FR)** NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_HOUR: \_\_\_\_\_\_\_\_

1-2 Solve the following systems of non-linear equation, for x and y.

1. $y=x^{2}+4x+16$ 2. $y=x^{2}+6x+4$

 $y=12x$ $y=-4x-5$

3. Write the following phrase as an expression: “Sum of two times a number x and five”.

4. Write the following expression as a phrase: $4-\frac{3}{x}$

5. Annaliese is measuring the progress of her plant’s growth. Today the plant is 7 cm high. The plant grows 1.5 cm per day. How many days will it take for Annaliese’s plant to be 22 cm tall? **WRITE AN EQUATION** that represents the situation and then **SOLVE** the equation.

6. McCall is planting a garden with the length 3 feet more than the width. What is the length and width of the garden if the area of the garden is 70 ft2? **WRITE AN EQUATION** that represents the situation and then **SOLVE.**

**PROBABILITY**

Given the sets below, find the following:

Sample Space: {1,2,3,4,5,6} A: {1,2,3,4} B:{3,4,5} C:{2,3}

7. What is  8. What is 

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. a) Is A ⊂C? Circle one. YES NO 10. What is $A^{c}?$

b) Is C ⊂A? Circle one. YES NO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A survey is conducted to see if people think football and soccer are awesome, yes or no. Use the table to answer the following questions.

11-14 Use the table to the right to answer.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Soccer | Football | Total |
| Yes | 231 | 59 | 290 |
| No | 39 | 321 | 360 |
| Total | 270 | 380 | 650 |

11. What is the $P\left(Soccer or Yes\right)?$

12. What is the $P\left(Football and No\right)$

13. What is the $P(Yes)?$

14. What is the $P\left(Soccer\right)?$