MATH 2: Additional handout

Review sheet: 7/28/2017

Answer in your own words:

1. What is a linear equation? What is the general stretegy to solve it?

2. State the quadratic formula for the equation $ax^2 + bx + c = 0$.

3. Note that the quadratic formula has $2a$ in the denominator. As we know, denominator could not be 0. How would you solve an equation like $ax^2 + bx + c = 0$ when $a = 0$?

4. How do you determine if an equation is of "peeling an onion" type?

5. To use zero factor property to solve an equation, what should we see on the left hand side of the equation? What should we see on the right hand side of the equation?

6. How do you locate a point on the coordinate plane?

7. What is an interval? Write your favorite interval, and represent it as inequalites and using real line notation

Solve the following problems

1. $5x + 2 = 7$

2. $\frac{1}{2}x - 4 = \sqrt{2}$

3. $x^2 - 3x - 18 = 0$

4. $3x^2 - x - 2 = 0$

5. $x^2 - 2x + 4$

6. $\dfrac{(\sqrt{x}+2)^2 - 13}{4} = 3$

7. $(\sqrt{x-4} - 2)(x^2 - 6x + 9) = 0$