## Math 45 Day 1

- o It is very important that you read and understand your syllabus. It will tell you!
  - How to earn more points and get a higher grade
  - What will happen if you cheat ( and it's bad)
  - What you need to buy for this class Much more
- of class, especially if you are hoping to crash.
- · you must purchase a MathXL code to do homework for this class. You must do homework to pass this class. Therefore, if you do not buy a MathXL code, you are choosing to fail.
- · Bring your scientific calculator to class everyday.

## Math 45 Overview

Review Arithmetic, esp. fractions. 5 chapl I chap 2 Mostly word problems Chap 3 lines and graphing one line at a time Chap 4 two lines at a time, system lots of algebra with variables Schap 5 -Lchap 6 factoring Jelas 7 fractions with variables

For most students, chapters 2,3,4 and 6 are very difficult.

This makes Math 45 a tough class.

These are the formulas students entering Math 45 need to with. Students will have additional formulas that are par curriculum and must have mastery of those also for the decomposition.

## Formula & Conversion Sheet for Math 45 Students Need to Know the Following by Memory

<u>Units</u> tell us how we are measuring items: inches, feet, yards, miles, meters, pounds, ounces, tons, liters, grams are a few of the units we use.

 $A = s^2$ remember answer will have square units. Area of a square: 1. must include units with answer. P = 4sPerimeter of a square: 2. remember answer will have square units. A = lwArea of a rectangle: P = 2l + 2wmust include units with answer. Perimeter of a rectangle:  $A = \pi r^2$ remember answer will have square units. Area of a circle: 5.  $C = 2\pi r$  or  $C = \pi D$ must include units with answer. Circumference of a circle: б. must include units with answer. Diameter of a circle: D=2r $r = \frac{D}{2}$ must include units with answer. Radius of a circle:  $A = \frac{1}{2}bh$  or  $A = \frac{bh}{2}$ remember answer will have square units 9. Area of a triangle: P = a + b + c must include units with answer. Perimeter of a triangle: 10. answer must have degree symbol. The three angles of a triangle:  $A + B + C = 180^{\circ}$ 11. the correct unit must be included with the answer. Distance = rate x time: D = rt12. units will be cubic units. Volume of a rectangular solid (box): V = lwh13. Simple interest formula Interest = principal x rate x time:  $I = \Pr t$ 14.  $a^2 + b^2 = c^2$ must include units with answer. Pythagorean theorem: 15. Must know the following perfect square roots: 16.  $(\sqrt{4}, \sqrt{9}, \sqrt{16}, \sqrt{25}, \sqrt{36}, \sqrt{49}, \sqrt{64}, \sqrt{81}, \sqrt{100}, \sqrt{121}, \sqrt{144}, \sqrt{169})$ Must know the following perfect cubic roots:  $(\sqrt[3]{-1},\sqrt[3]{1},\sqrt[3]{-8},\sqrt[3]{8},\sqrt[3]{-27},\sqrt[3]{27},\sqrt[3]{-64},\sqrt[3]{64},\sqrt[3]{-125},\sqrt[3]{125})$ Must know the following perfect 4<sup>th</sup> roots: 18.  $(2^2,2^3,2^4,2^5,2^6,2^7)$ Must know the following powers of 2: 19. 20. Must know the following U.S. Conversions: ( 12 inches = 1 foot; 3 feet = 1 yard; 36 inches = 1 yard)

(60 seconds = 1 minute; 60 minutes = 1 hour; 24 hours = 1 day; 7 days = 1 week;

21.

Must know the following time conversions:

52 weeks = 1 year