Intermediate Algebra Brush-Up Session **- Radicals and Rational Exponents, Solving Equations, Pythagorean theorem**

If you placed into MATH 098, this might be useful for you

1. Simplify:

a) $\sqrt{4x^2}$ b) $\sqrt[3]{-8x^6}$ c) $\sqrt{16(x-4)^4}$

d) $27^{\frac{4}{3}}$ e) $8^{-\frac{1}{3}}$ f) $(m^{\frac{-21}{2}})^{\frac{8}{7}}$

2. Write an equivalent expression using **radical notation**

a) $x^{\frac{1}{2}}$ b) $t^{\frac{2}{3}}$

3. Solve:

a) $\sqrt{4x+5}-4=2$

3. b) $\sqrt{x+10} = \sqrt{2x+7}$

4. Solve using the Pythagorean Theorem.

a) Find the hypotenuse of a right triangle if one side equals 7 feet and the other side equals 5 feet.

b) How tall is a pole if a 40 foot guy wire reaches from the top of the pole to a point on the ground 19 feet from the bottom of the pole?

Need more help? Check out these Modumath Lessons: Intermediate Algebra : Lessons 23, 24, & 31 http://modumath.org/mm/GraysHarbor.html