

Name _____
Date _____

Introduction to Technical Mathematics
Class #3A www.wnyssis.com

Warm Up

Quality – Accuracy – Transfer – 100%

Section 1. Practice Problems

1. A rectangular space has a length l and a width w . Write a formula for its perimeter, which is the sum of the lengths of all 4 sides.

2. The voltage V across an electric circuit equals the current I times the resistance in the circuit. If the resistance in a certain circuit is the sum of the resistances R and r , write the formula for voltage.

3. The value V of a machine depreciates so that its value after t years is its original value p divided by the sum of t and 1. Express this statement as a formula.

4. The time T for one complete oscillation of a pendulum equals approximately 6.28 times the square root of the quotient of the length l of the pendulum and the acceleration g due to gravity. Find the resulting formula.

EVALUATE:

1. Find the perimeter in #1 if the length and width are 29.6cm and 37.8cm respectively.

2. In #2 above, find the voltage if $I = 0.00427$ A, $R = 82.6 \Omega$ and $r = 1.08\Omega$.

3. What is the value of a \$4000 machine after it has depreciated for 3 years (#3 above)

4. In #4 above, what is the time T (in seconds) if $l = 5.26$ ft and $g = 32.2$ ft/sec².