Name: _____

Student ID: _____

Quiz 3

Question 1. *(5 marks)*

(a) Change 9.80 m/s^2 to centimetres per minute squared.
(b) Change 5.25 mV to watts per ampere given that $V = J/(A \cdot s)$ and $W = J/s$.

a) $9.80 \dfrac{m}{s^2} = 9.80 \dfrac{m}{s^2} \left(\dfrac{cm}{10^{-2}m} \right) \left(\dfrac{60s}{min} \right)^2 = 3.53 \times 10^6 \ cm/min^2$

b) $5.25 mV = 5.25 (10^{-3}) \dfrac{J}{A \cdot s}^{(W)} = 5.25 \times 10^{-3} \ W/A$

Question 2. *(2 marks)* Determine which of the pair of approximate numbers is more precise and which is more accurate:

(a) 30.8; 0.01

MORE ACCURATE   ← MORE PRECISE

(b) 0.041; 7.673

↖ MORE ACCURATE

SAME PRECISION

Question 3. *3 marks* Perform the operations on the following approximate numbers:

(a)

$12.78 + 1.0495 - 1.6333 = 12.20$

(b)

$\dfrac{0.3275}{1.096 \times 0.50085} = 0.5966$