Answers must be clearly **legible**, **simplified** and **boxed** or **circled**. Unless otherwise stated write answer as an **exact** integer or rational or use **two** decimal accuracy. **Units** required.

1) A 20.0% Heprin solution is made from 200 cc of pure Heprin and 800 cc of saline. Underline current zeros and/or add zeros to indicate the accuracy necessary in each component to expect the mix to be accurate to the nearest tenth percent?

C _{mi×} =	pure Heprin
	pure Heprin + saline

200. __ _ cc Heprin

800. cc Saline

- 2a) $6 \times 10^7 \text{ cc} =$
- A) 6 thousand cc
- B) 60 thousand cc
- C) 600 thousand cc

- D) 6 million cc
- E) 60 million cc
- E) None of These

- 2b) $5 \times 10^{-6} \text{ m} =$
- A) 5 thousandths m
- B) 5 ten thousandths m
- C) 5 millionths m

- D) 5 ten millionths m
- E) 50 ten thousandths m
- E) None of These

3a) 6.2 L =

- A) $6.2 \times 10^2 \text{ mL}$
- B) $6.2 \times 10^3 \text{ mL}$
- C) 6.2×10^{-2} mL

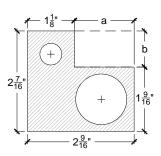
- D) $6.2 \times 10^{-3} \text{ mL}$
- E) 6.2×10^{-6} mL
- E) None of These

- 3b) 0.0078 L =
- A) $7.8 \times 10^3 \text{ mL}$
- B) $7.8 \times 10^6 \text{ mL}$
- C) 7.8 mL

- D) $7.8 \times 10^3 L$
- E) $7.8 \times 10^{-3} \text{ mL}$
- E) None of These

- 4a) Multiply: $(2.7 \times 10^{15})(7.9 \times 10^{-3})$
- 4b) Divide: $\frac{2.7 \times 10^{15}}{7.9 \times 10^{-3}}$

5) Find a & b



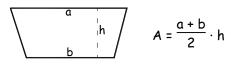
Substitute and simplify to one number with <u>correct units</u>. c = 13 cm, b = -12 cm, g = 16 m/sec², L = 0.025 m.

6)
$$a = \sqrt{c^2 - b^2}$$

7)
$$f = \frac{1}{2\pi} \sqrt{\frac{g}{L}}$$

a =

8) Find the area (sq-ft) of a Trapezoid with a = 6' 8", b = 4' 2", h = 3' 7"



9) Find the Volume of a conical pile of gravel with a diameter of 80' and a height of 32'.

10) Find the sq-ft needed to paint the outside of a Quanset Hut including the two ends. Assume a half cylinder for the shape.Length 40', Width 20' Round to nearest sq-ft.

