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?

$$
C_{\text {mix }}=\frac{\text { pure Heprin }}{\text { pure Heprin }+ \text { saline }}
$$

200. $\qquad$ cc Heprin
201. $\qquad$ cc Saline

2a) $6 \times 10^{7} \mathrm{cc}=$
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) $5 \times 10^{-6} \mathrm{~m}=$
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) $6.2 \times 10^{2} \mathrm{~mL}$
B) $6.2 \times 10^{3} \mathrm{~mL}$
C) $6.2 \times 10^{-2} \mathrm{~mL}$
D) $6.2 \times 10^{-3} \mathrm{~mL}$
E) $6.2 \times 10^{-6} \mathrm{~mL}$
E) None of These

3b) $0.0078 \mathrm{~L}=$
A) $7.8 \times 10^{3} \mathrm{~mL}$
B) $7.8 \times 10^{6} \mathrm{~mL}$
C) 7.8 mL
D) $7.8 \times 10^{3} \mathrm{~L}$
E) $7.8 \times 10^{-3} \mathrm{~mL}$
E) None of These

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


Substitute and simplify to one number with correct units. $c=13 \mathrm{~cm}, b=-12 \mathrm{~cm}, g=16 \mathrm{~m} / \mathrm{sec}^{2}, L=0.025 \mathrm{~m}$.
6) $a=\sqrt{c^{2}-b^{2}}$
7) $f=\frac{1}{2 \pi} \sqrt{\frac{g}{L}}$
$a=$

$$
f=
$$

8) Find the area ( $s q-f t$ ) of a Trapezoid with

$$
a=6^{\prime} 8^{\prime \prime}, b=4^{\prime} 2^{\prime \prime}, h=3^{\prime} 7^{\prime \prime}
$$


9) Find the Volume of a conical pile of gravel with a diameter of $80^{\prime}$ and a height of $32^{\prime}$.
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.


