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.

Substitute and Compute using b_1 = 5.25, b_2 = 5.90, h = 7.30, D = 12.5, P = 13.0%

1) $\frac{b_1 + b_2}{2} \cdot h =$

- $2) \qquad \frac{D}{\sqrt{1+P^2}} =$
- 3) Round to 4 significant digits: $12.3456 + \frac{19}{64} \approx$
- 4) Round to the nearest whole 64th: 0.2976 in $\approx \frac{1}{64}$
- 5a) 60 Mw =
- A) 6 thousand watts
- B) 60 thousand watts
- C) 600 thousand watts

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

- 5b) 55 km =
- A) 550 m
- B) 5,500,000 m
- C) 5,500 m

- D) 55,000 m
- E) 0.055 m

E) None of These

- 6a) 0.062 kv =
- A) 6.2 thousand volts
- B) 62 thousand volts
- C) 62 volts

- D) 6.2 million volts
- E) 6.2 volts
- E) None of These

- 6b) 65 mv =
- A) 650 microvolts
- B) 6.5 cv

C) 0.65 volts

- D) 65 millionths volts
- E) 65 million volts
- E) None of These
- 7) Convert to feet & inches rounded to the nearest whole 16^{th} inch: 73.6302 ft \approx

---ft --- 16 in

8) Convert to feet & inches rounded to the nearest whole 16 th inch: 8.587742 ft \approx

____ ft ____ <u>16</u> in

9) A 12 ft pipe is cut into 7 equal pieces. Assuming no loss due to the cuts, what is the size of each piece to the nearest 16^{th} inch. Give answer as ____ ft ___ $\overline{16}$ in

10) Find the area in sq-ft. $A = \frac{a+b}{2}h$ when $a = 5' \cdot 5 \cdot \frac{3}{8}$ ", $b = 9' \cdot 2 \cdot \frac{1}{8}$ ", $h = 3' \cdot 6 \cdot \frac{7}{8}$ ".