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[4]

1. Convert the following and round to 3 significant digits. Use scientific notation for your final answer.

- $15.7 \frac{km}{min}$ to $\frac{m}{s}$
- 238 ng to kg
- 157 986 seconds to years
- $925 m^3$ to mm^3

[4] 2. Find the magnitude and direction of vector $\vec{d} = [7, -11]m$. Include a diagram in your solution.

- [4] 3. Find the vector components of $\vec{b} = 45.3 \text{ m } [N12^\circ W]$. Include a labeled diagram of the vector and express the vector components in vector notation.

- [6] 4. Identify the number of significant digits and round to the nearest hundredth

Number	125.9	0.21990	2500.0
Number of significant digits			
Number rounded to the nearest hundredth			