

Math 241, Problem Set #3
(due **in class** Fri., 9/27/13)

Stewart, section 10.4, problems 13, 14, 16, 22, 40, 42, 43, 44, 53.

Stewart, section 10.5, problems 1, 10, 18, 20, 26, 32, 34, 46, 54, 56, 57, 58.

Also:

- A. Given points $P \neq Q$ in \mathbf{R}^3 , describe geometrically the set of all points R such that $\overrightarrow{PQ} \times \overrightarrow{PR} = \mathbf{0}$.
- B. Given points $P \neq Q$ in \mathbf{R}^3 , describe geometrically the set of all points R such that $\overrightarrow{PQ} \cdot \overrightarrow{PR} = 0$.
- C. Given points $P \neq Q$ in \mathbf{R}^3 , describe geometrically the set of all points R such that $\overrightarrow{PQ} \cdot \overrightarrow{PQ} = \overrightarrow{PR} \cdot \overrightarrow{PR}$.