

Subject: Session 12 Problems

Year: _____ Month: _____ Date: ()

58 min

1.

$$\vec{P_1P_2} \times \vec{P_1P_3} = \begin{vmatrix} i & j & k \\ -1 & 1 & 0 \\ 0 & 1 & -1 \end{vmatrix} = -i + j + k$$

$$\rightarrow -i + j + k = -2$$

$$2. \vec{A} = \langle 2, -1 \rangle \rightarrow \vec{N} = \langle 1, 2 \rangle$$

$$\rightarrow 2x + y = 5$$

Distances to

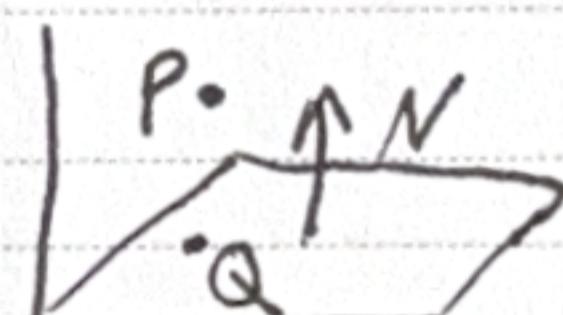
Planes and lines

$$1. \vec{N} = \langle 2, 1, -2 \rangle$$

$$\frac{\vec{PQ} \cdot \vec{N}}{|\vec{N}|} = \frac{2}{3}$$

$$P = \langle 1, 0, 0 \rangle$$

$$Q = \langle 0, 0, 0 \rangle$$



$$2. \vec{N} = \langle 2, 1 \rangle$$

$$\frac{\vec{QP} \cdot \vec{N}}{|\vec{N}|} = \frac{2}{\sqrt{5}}$$

$$P = \langle 0, 0 \rangle$$

$$Q = \langle 1, 0 \rangle$$

