(Vectors) Sheet 1

A) Express the vectors in terms of \hat{i} and \hat{j} .

1)
$$\langle 2, 7 \rangle =$$

2)
$$\langle -6, 5 \rangle$$
 = _____

3)
$$\langle 1, -5 \rangle = \underline{\hspace{1cm}}$$

4)
$$\langle -3, -1 \rangle =$$

5)
$$\langle -10, 10 \rangle =$$

6)
$$\langle 4, 6 \rangle$$
 = _____

7)
$$\langle -7, -8 \rangle =$$

8)
$$\langle 8, -9 \rangle$$
 = _____

B) Write each of the following vectors in $\langle a, b \rangle$ form.

$$1) \qquad -\hat{i} + \hat{j} \qquad = \qquad \underline{\hspace{2cm}}$$

2)
$$2\hat{i} + 5\hat{j} =$$

$$3) \quad -8\hat{i} - \hat{j} \quad = \quad \underline{\hspace{1cm}}$$

4)
$$10\hat{i} - 6\hat{j} =$$

5)
$$5\hat{i} + 6\hat{j} =$$

6)
$$-9\hat{i} - 4\hat{j} =$$

$$7) \qquad 4\hat{i} - 2\hat{j} \qquad = \qquad \underline{\hspace{1cm}}$$

8)
$$-3\hat{i} + 7\hat{j} =$$
