Name : _____

Linear Combination of Vectors

Sheet 2

A) Find the linear combination of given vectors.

1) If $\vec{a} = \langle 0, 5 \rangle$ and $\vec{b} = \langle 7, 1 \rangle$, find $2\vec{b} - 2\vec{a}$.

2) If $\vec{v} = \langle -4, -3 \rangle$ and $\vec{w} = \langle 2, 6 \rangle$, find $\vec{v} + \vec{w}$.

3) If $\vec{m} = \langle 8, 2 \rangle$ and

nd $\vec{z} = \langle 4, 3 \rangle$, find $3\vec{m} + \vec{n}$.

$\vec{y}$.

5) If $\vec{x} = \langle -6, 5 \rangle$ and

$\rangle$ and $\vec{h} = \langle -4, 9 \rangle$, find $\vec{x} - 2\vec{y}$.

$\vec{h}$.

B) 1) Which of the f

$= \langle -2, -9 \rangle$?

a) $\langle 18, 5 \rangle$ b) $\langle 18, 59 \rangle$ c) $\langle 18, -5 \rangle$ d) $\langle -18, -5 \rangle$

2) Which of the following is $5\vec{q} - 5\vec{r}$, if $\vec{q} = \langle 1, 2 \rangle$ and $\vec{r} = \langle 9, 4 \rangle$?

a) $\langle 40, -10 \rangle$ b) $\langle -40, -30 \rangle$ c) $\langle 40, 10 \rangle$ d) $\langle -40, -10 \rangle$