

Written HW15 – MATH 1540 Fall 2020

**Due by 25 November for timely completion credit**

Let  $\vec{a} = \langle 1, 2 \rangle$  and let  $\vec{b} = \langle -1, 4 \rangle$ . See the 20 November notes for definitions as needed.

1. Calculate  $5\vec{a} - 2\vec{b}$
2. Calculate  $\|\vec{a}\|$
3. Calculate  $\vec{a} \cdot \vec{b}$
4. Calculate the direction of  $\vec{a}$
5. Calculate  $\|\vec{a} + \vec{b}\|$
6. Calculate  $\|\vec{a} - \vec{b}\|$
7. Calculate the direction of  $\vec{a} + \vec{b}$