

Quiz 1 – MATH 1430 Fall 2022

Let  $\vec{a} = \langle 1, 2, 3 \rangle$ ,  $\vec{b} = \langle -1, 3, 0 \rangle$ . Recall the formula

$$\theta = \arccos \left( \frac{\vec{a} \cdot \vec{b}}{\|\vec{a}\| \|\vec{b}\|} \right).$$

Compute...

1.  $2\vec{a} - \vec{b}$

2.  $\|\vec{a} + \vec{b}\|$

3.  $\vec{a} \cdot \vec{b}$

4. the angle between  $\vec{a}$  and  $\vec{b}$