

## Dot product problems

- Compute  $\langle 1, 2, -4 \rangle \cdot \langle 2, 3, 5 \rangle$ .
  - Is the angle between these two vectors acute, obtuse or right?
- Suppose  $\mathbf{B} = \langle 2, 2, 1 \rangle$ . Suppose also that  $\mathbf{B}$  makes an angle of  $30^\circ$  with  $\mathbf{A}$  and  $\mathbf{A} \cdot \mathbf{B} = 6$ . Find  $|\mathbf{A}|$ .
- If  $\mathbf{A} \cdot \mathbf{B} = 0$  what is the angle between  $\mathbf{A}$  and  $\mathbf{B}$ ?

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