

1. a)  $1 \cdot 2 + 2 \cdot 3 + (-4) \cdot 5 = -12$

b) obtuse. negative cosine.

2.  $|A| \cdot 3 \cdot \frac{\sqrt{3}}{2} = 6 \rightarrow |A| = \frac{4\sqrt{3}}{3}$

3. either  $|A|=0$  or  $|B|=0$  or  $90^\circ$