

Subject: Session 4 Problems

Year: _____ Month: _____ Date: ()

1. a)

i) $\frac{A \cdot B}{|B|} = \frac{15}{5} = 3$

ii) $\frac{A \cdot B}{|A|} = \frac{15}{\sqrt{10}}$

b) $\frac{A \cdot B}{|B|} = \frac{29}{5}$

2. $\frac{A \cdot B}{|B|} = 0 \rightarrow a+6=0 \rightarrow a=-6$

$\frac{A \cdot B}{|B|} < 0 \rightarrow a+6 < 0 \rightarrow a < -6$

3. $\frac{\pi}{2}, 90^\circ$