

## Answers to Vector Test Study Guide (ID: 1)

- |   |                                 |   |   |
|---|---------------------------------|---|---|
| 1) $166.61^\circ$   | 2) $296.57^\circ$               | 3) $\langle 4, -8 \rangle$  | 4) $\langle -9, -18 \rangle$  |
| 5) 30   | 6) $2\sqrt{74} \approx 17.205$  | 7) $\langle -19, -4 \rangle$  | 8) $\langle -66, 17 \rangle$  |
| 9) 6  | 10) -34                         | 11) <i>Parallel</i>   | 12) <i>Orthogonal</i>   |
| 13) 20.22; $98.53^\circ$                                    | 14) 9.49; $198.43^\circ$        | 15) $\left\langle \frac{4\sqrt{17}}{17}, -\frac{\sqrt{17}}{17} \right\rangle$ | 16) $\left\langle \frac{7\sqrt{65}}{65}, \frac{4\sqrt{65}}{65} \right\rangle$ |
| 17) $\langle 0, 3, -6 \rangle$<br>$3\sqrt{5} \approx 6.708$ | 18) $\sqrt{134} \approx 11.576$ |   |   |