Vector Worksheet

1.) How are vectors and scalars different?

2.) Generally which direction is positive for horizontal vectors and vertical vectors?

3.) How should all vector diagrams be drawn?

4.) What is the name for the number portion (size) of a vector?

5.) What is the name of the answer when adding vectors?

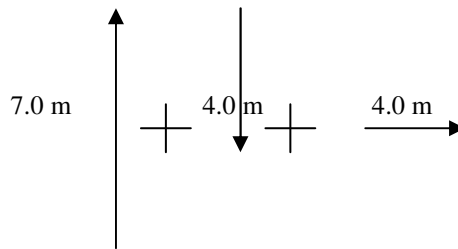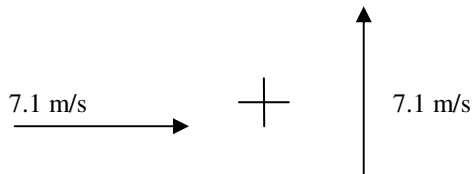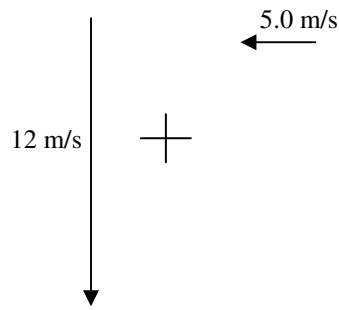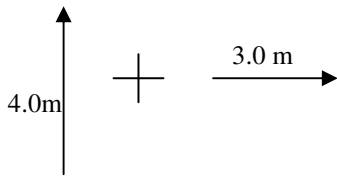6.) Add the following vectors and express angles in your answer:

7.0 m/s north + 6.3 m/s south + 2.0 m/s north

9.2 m [E] + 7.4 m [W] + 3.2 m [E]

7.) Add the following vectors, express appropriate angles in your answer.

4.0m   +   3.0 m →

5.0 m/s ←

12 m/s ↓   +

7.1 m/s →   +   7.1 m/s ↑

7.0 m ↑   +   4.0 m ↓   +   4.0 m →

Answers -
1.) vectors have direction   2.) right (horizontal), up (vertical)   3.) tip-to-tail
4.) magnitude   5.) resultant   6a.) 12.0 m [E]   6b.) 3.0 m [W]
6c.) 2.70 m/s [N]   6d.) 5.0 m [E]   7a.) 5.0 m at 53° N of E   7b.) 13 m at 67° S of W
7c.) 10 m/s at 45° N of E   7d.) 5.0 m at 53° E of N