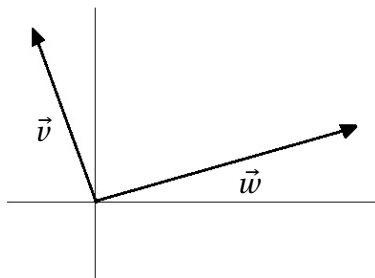

Chapter 13: Vectors and Vector Valued Functions

1.1 Vectors in the Plane

Homework: 21-23, 24-27, 28-31, 32-40, 41-46, 49-52, 60-63.

Find the vectors graphically.



1. $\vec{v} + \vec{w}$

2. $\vec{v} - \vec{w}$

3. $2\vec{v} + \vec{w}$

24-27, 28-31 Find $\vec{a} + \vec{b}$, $\vec{a} - \vec{b}$, $\|\vec{a} - \vec{b}\|$, and $\|2\vec{a}\|$.

1. $\vec{a} = (2, 1)$, $\vec{b} = (1, -1)$.

2. $\vec{a} = 2\vec{i} - \vec{j}$, $\vec{b} = \vec{i} + 2\vec{j}$.

41-46 Suppose $P = (-1, 1)$, $Q = (1, 2)$, $R = (2, 3)$.

1. Find \vec{PR} .

2. Find two unit vectors parallel to \vec{PQ} .

3. Find a vector of length 3 that is parallel to \vec{RQ} .

49-52

1. Find a vector that gives a force of magnitude 10 Newtons at an angle 60° from the x -axis.