

Vector Algebra WS

a. $5.0 \times 10 \text{ N}$ [36° above $+x$]

b. 31 m [67° below $+x$]

CAN'T ADD!
c. DIMENSIONS ARE DIFFERENT

d. 9.9 m/s [67° above $-x$]

e. 8300 m [13° E of N]

f. 75 m/s [13° W of S]

g. $1.4 \frac{\text{m}}{\text{s}^2}$ [36° below $-x$]

\downarrow
 $\frac{\text{N}}{\text{kg}} = \frac{\text{m}}{\text{s}^2}$

② a. $1.0 \times 10 \text{ m/s}$ [53° S of E]
(37° E of S)

b. $1.0 \times 10 \text{ m/s}$ [53° S of E]
(37° E of S)

c. $1.0 \times 10 \text{ m/s}$ [53° N of E]

d. $1.0 \times 10 \text{ m/s}$ [53° S of W]

e. Impossible

f. 2.0 m/s West

g. $1.0 \times 10 \text{ m/s}$ [53° S of W]

h. $1.0 \times 10 \text{ m/s}$ [53° N of E]

i. 0.83 m/s^2 [53° S of W]

j. $6.0 \times 10^3 \text{ kgm/s}$ [1.9° S of E]

k. Impossible

l. 18 m [63° S of W]

