1. Determine the components of the following vectors.
(a) A bear walks 500 m at $30^{\circ}$ North of east.
(b) A runner runs 10000 m at $45^{\circ}$ south of west.
(c) A ball has a velocity of $25 \mathrm{~m} / \mathrm{s}$ at an angle of $75^{\circ}$ below the horizontal.
(d) The acceleration due to gravity has a value of $9.8 \mathrm{~m} / \mathrm{s}^{2}$ pointing vertically downward.
(e) A bear walks 3000 m at $53^{\circ}$ north of west.
(f) A bear walks $4000 m$ at $37^{\circ}$ south of east.
(g) A bear walks $1000 m$ due north.
(h) A bear walks 500 m due west.
(i) A bear walks $2500 m$ due east.
