Worksheet forces and friction

**I.** Solve each equation for B algebraically.

1. $R=3KB$ 2. $F\frac{K}{B}=2W$ 3. $ZK^{2}=R+B$ 4. $\frac{K}{Q}+L=3(BX)^{4}$ 5. $\frac{B}{K}-D=H$

**II.** Solve each equation trigonometrically for the component vector in terms of the angle and vector.

1. 2. 3. 4.

**III.** Draw a free body diagram for the forces acting on the piano for each of these situations.

1.  2. 3.

**IV.** Write a mathematical equation for the sum of the forces in x and y directions for each of these free-body diagrams in terms of the declared variables.

1.2.3.4.