d. You slide down a steep hill.

\[ \text{Force} \begin{array}{c} \text{Sign} \\ \text{mg} \end{array} \]
\[ \begin{array}{c} \text{N} \\ \text{Fr} \end{array} \]
\[ \text{Fr}_{\text{net}} \]

e. A ball is thrown straight up. Consider the ball from one microsecond after it leaves your hand until the highest point of its trajectory.

\[ \text{Force} \begin{array}{c} \text{Sign} \\ \text{mg} \end{array} \]
\[ \begin{array}{c} \text{Fr}_{\text{net}} \end{array} \]

f. A car turns a corner at constant speed.

\[ \text{Forces} \begin{array}{c} \text{Sign} \\ \text{F}_{\text{c}} \end{array} \]
\[ \begin{array}{c} 0 \\ \text{Fr}_{\text{net}} \end{array} \]
\[ \text{F}_{\text{frict.}} \]
\[ \text{F}_{\text{c}} \]

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12.5 Gravitational Potential Energy

7. Explain why the gravitational potential energy of two masses is negative. Note that saying "because that's what the formula gives" is not an explanation. An explanation makes use of the basic ideas of force and potential energy.

It would mean you have to put in energy to make the gravitational potential energy 0 as in an astronaut going to space where you have to use energy to get away from Earth's gravitational energy.