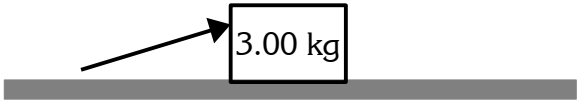
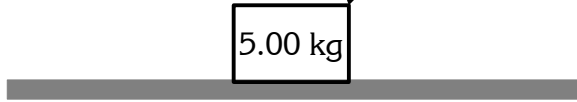


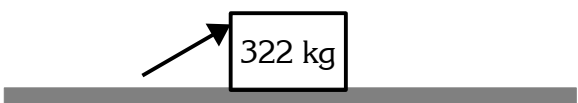



Pushing at an angle...

In each situation below, there is a block on a frictionless table. Mr. Stonebraker is also pushing on the block at some angle, given by θ . You will need to...

- find the x -component and y -component of the pushing force
- analyze the x -direction to find the block's acceleration with $a = F_{net}/m$
- analyze the y -direction to find the normal force, much like the **Normal Force Exercises** sheet

<p>1)</p> <div style="text-align: center;"> <p>$F_{push} = 10.0 \text{ N}$ $\theta = 330.^\circ$</p> <p>4.00 kg</p> </div> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>	<p>2)</p> <div style="text-align: center;"> <p>$F_{push} = 10.0 \text{ N}$ $\theta = 350.^\circ$</p> <p>4.00 kg</p> </div> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>
<p>3)</p> <div style="text-align: center;"> <p>$F_{push} = 35.0 \text{ N}$ $\theta = 225.^\circ$</p> <p>5.00 kg</p> </div> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>	<p>4)</p> <div style="text-align: center;"> <p>$F_{push} = 28.0 \text{ N}$ $\theta = 0.00^\circ$</p> <p>2.00 kg</p> </div> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>

<p>5)</p> <p>$F_{push} = 20.0 \text{ N}$ $\theta = 20.0^\circ$</p>  <p>3.00 kg</p> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>	<p>6)</p> <p>$F_{push} = 14.0 \text{ N}$ $\theta = 255.^\circ$</p>  <p>5.00 kg</p> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>
<p>7)</p> <p>$F_{push} = 40.0 \text{ N}$ $\theta = 135.^\circ$</p>  <p>4.00 kg</p> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>	<p>8)</p> <p>$F_{push} = 50.0 \text{ N}$ $\theta = 205.^\circ$</p>  <p>10.0 kg</p> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>
<p>9)</p> <p>$F_{push} = 2010 \text{ N}$ $\theta = 30.0^\circ$</p>  <p>322 kg</p> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>	<p>10)</p> <p>$F_{push} = 2010 \text{ N}$ $\theta = 330.^\circ$</p>  <p>322 kg</p> <p>F_{px}:</p> <p>F_{py}:</p> <p>a:</p> <p>F_N:</p>