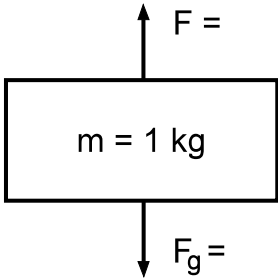
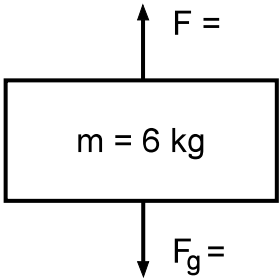
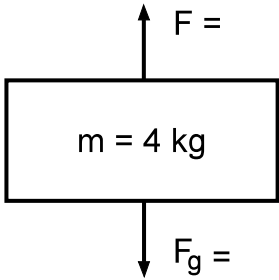
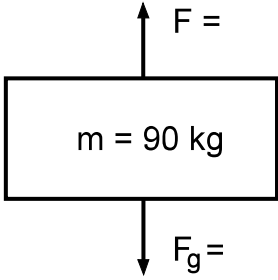
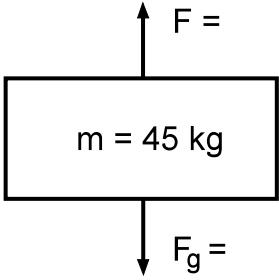
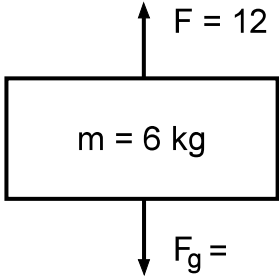
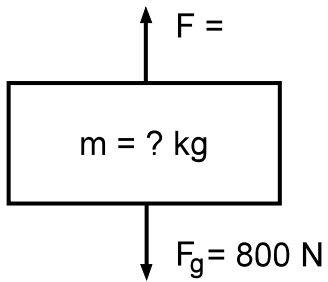


Each of the following free body diagrams represents a different problem. From the given data, solve for the missing quantities. Complete solutions for each problem should be shown (use a separate sheet if necessary). {Use $g = 10 \text{ m/s}^2$ }

<p>1)</p>  <p>$F_g =$</p> <p>$a = 2.0 \text{ m/s}^2 \downarrow$</p> <p>$F_{\text{net}} =$</p> <p>$F =$</p>	<p>2)</p>  <p>$F_g =$</p> <p>$a = 3.0 \text{ m/s}^2 \uparrow$</p> <p>$F_{\text{net}} =$</p> <p>$F =$</p>	<p>3)</p>  <p>$F_g =$</p> <p>$a = 2.0 \text{ m/s}^2 \downarrow$</p> <p>$F_{\text{net}} =$</p> <p>$F =$</p>
<p>4)</p>  <p>$F_g =$</p> <p>$a = 0.5 \text{ m/s}^2 \downarrow$</p> <p>$F_{\text{net}} =$</p> <p>$F =$</p>	<p>5)</p>  <p>$F_g =$</p> <p>$a = 1.0 \text{ m/s}^2 \uparrow$</p> <p>$F_{\text{net}} =$</p> <p>$F =$</p>	<p>6)</p>  <p>$F_g =$</p> <p>$F_{\text{net}} =$</p> <p>$a =$</p>

7)

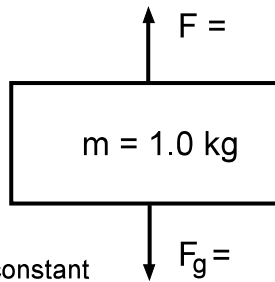


m =

a = $1.0 \text{ m/s}^2 \downarrow$ $F_{\text{net}} =$

F =

8)



v = constant

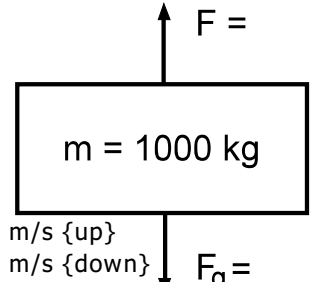
 $F_g =$

a =

 $F_{\text{net}} =$

F =

9)

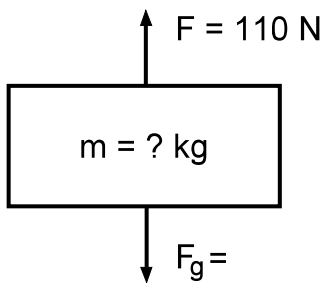

 $v_1 = 2 \text{ m/s \{up\}}$
 $v_2 = 2 \text{ m/s \{down\}}$
 $\Delta t = 4.0 \text{ s}$

a =

 $F_g =$ $F_{\text{net}} =$

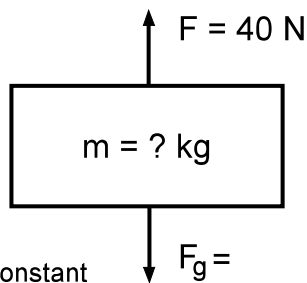
F =

10)

a = $1.0 \text{ m/s}^2 \{\text{up}\}$ $F_g =$ $F_{\text{net}} =$

m =

11)



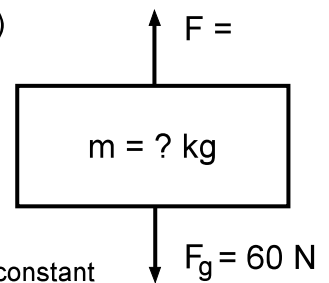
v = constant

a =

 $F_{\text{net}} =$ $F_g =$

m =

12)



v = constant

a =

F =

 $F_{\text{net}} =$

m =