Calculating Net Forces - Examples

Interpret each drawing of forces on the box. Calculate and write the resulting net force on the blank below the box (make sure to include the correct unit of measure). On the next blank, write the word balanced or unbalanced and circle the arrow for the direction of the resulting net force. See the examples below.

Examples:

<table>
<thead>
<tr>
<th></th>
<th>A.</th>
<th>B.</th>
<th>C.</th>
<th>D.</th>
<th>E.</th>
<th>F.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="image" alt="Drawing A" /></td>
<td><img src="image" alt="Drawing B" /></td>
<td><img src="image" alt="Drawing C" /></td>
<td><img src="image" alt="Drawing D" /></td>
<td><img src="image" alt="Drawing E" /></td>
<td><img src="image" alt="Drawing F" /></td>
</tr>
<tr>
<td></td>
<td><strong>225 N</strong></td>
<td><strong>75 N</strong></td>
<td><strong>50 N</strong></td>
<td><strong>792 N</strong></td>
<td><strong>550 N</strong></td>
<td><strong>987,256 N</strong></td>
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<td></td>
<td><img src="image" alt="Force Diagram" /></td>
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<tr>
<td></td>
<td>Net Force</td>
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<td></td>
<td><img src="image" alt="Force Result" /></td>
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Net Force:  

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<tr>
<td></td>
<td><img src="image" alt="Resultant Force" /></td>
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Net Force:  

Balanced or Unbalanced:  

Balanced:  

Unbalanced:  

Direction:  

Direction:  

Direction:  

Direction:  

Direction:
Calculating Net Forces

Interpret each drawing of forces on the box. Calculate and write the resulting net force on the blank below the box (make sure to include the correct unit of measure). On the next blank, write the word balanced or unbalanced and circle the arrow for the direction of the resulting net force.

1.  
   \[ \begin{array}{c}
   100 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \] 

   \[ \begin{array}{c}
   50 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

2.  
   \[ \begin{array}{c}
   545 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

   \[ \begin{array}{c}
   732 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

3.  
   \[ \begin{array}{c}
   61 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

   \[ \begin{array}{c}
   192 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

4.  
   \[ \begin{array}{c}
   1231 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

   \[ \begin{array}{c}
   562 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

5.  
   \[ \begin{array}{c}
   653 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

   \[ \begin{array}{c}
   352 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

6.  
   \[ \begin{array}{c}
   8732 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

7.  
   \[ \begin{array}{c}
   577 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

   \[ \begin{array}{c}
   2957 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

8.  
   \[ \begin{array}{c}
   83 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]

   \[ \begin{array}{c}
   96 \text{ N} \\
   \downarrow \\
   \text{Net Force} \\
   \end{array} \]
Calculating Net Forces - Answer Key

Examples

A. 225 Newtons (N) - unbalanced - to the right
B. 75 N – unbalanced – to the left
C. 0 N – balanced – no direction
D. 224 N – unbalanced – to the right
E. 13 N – unbalanced – to the left
F. 6011 N – unbalanced – to the left

Problems

1. 25 N – unbalanced – to the left
2. 0 N – balanced – no direction
3. 192 N – unbalanced – to the right
4. 348 N – unbalanced – to the right
5. 5 N – unbalanced – to the right
6. 8732 N – unbalanced – to the right
7. 2380 N – unbalanced – to the left
8. 13 N – unbalanced – to the left