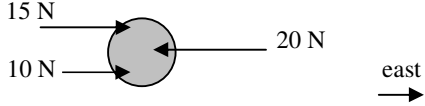
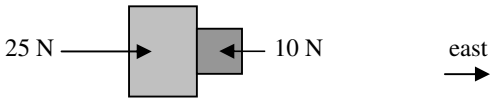
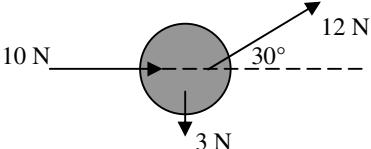
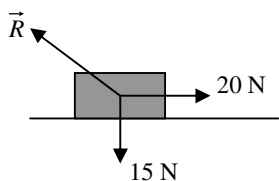
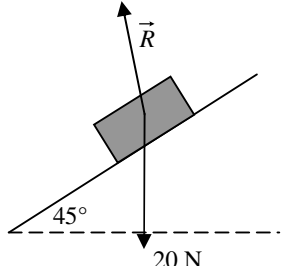
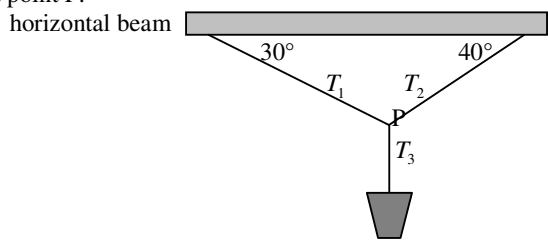


Physics worksheet – Resultant (net) force

<p>Q1</p>  <p>Find the resultant of the three forces on the object.</p>	<p>Q2</p>  <p>Find the net force on the system of two objects.</p>
<p>Q3a</p>  <p>Resolve the forces into horizontal and vertical components to find the resultant force on the object.</p>	<p>Q3b Add the force vectors graphically (by scale drawing) to find the net force on the object.</p>
<p>Q4a A block slides on a horizontal surface at constant velocity. The forces on the block are shown in the diagram, and the resultant force is zero. Draw a vector diagram to show the addition of the forces.</p> 	<p>Q4b Find the magnitude and direction of \vec{R}.</p>
<p>Q5a A block slides down an inclined plane with increasing speed. The forces on the block are shown in the diagram, and the net force is 5 N. Draw a vector diagram to show the addition of the two forces to give the net force.</p> 	<p>Q5b Find the magnitude and direction of \vec{R}.</p>
<p>Q6a A bucket of water is suspended by three cords of negligible mass. The tensions in the cords are T_1, T_2 and T_3. Draw a vector diagram to show the addition of the three forces acting at point P.</p> 	<p>Q6b Given $T_3 = 20$ N, find T_1 and T_2.</p>