

Name: \_\_\_\_\_ Date: \_\_\_\_\_

$m_r^\beta$  **Physics Practice: Free-body diagram guided notes**

Given a problem described in terms of real objects, we use a *free-body diagram* to create an abstract description of the problem.

1. FBD rule 1:

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2. FBD rule 2:

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3. FBD rule 3:

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4. FBD rule 4:

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5. FBD rule 5:

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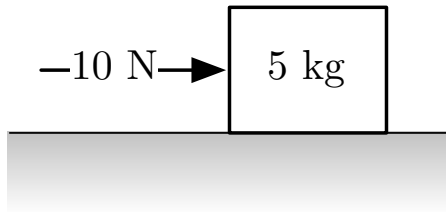
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6. FBD rule 6:

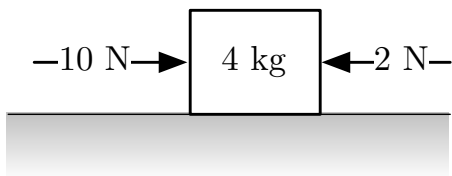
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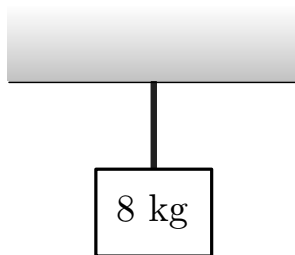
7. A mass is being pushed as depicted. Draw the free-body diagram.



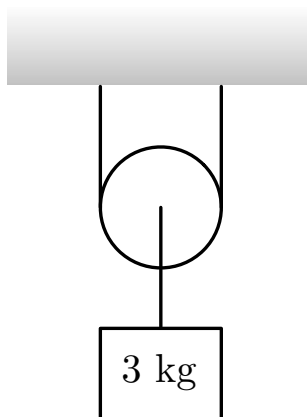
8. A mass is being pushed as depicted. Draw the free-body diagram.



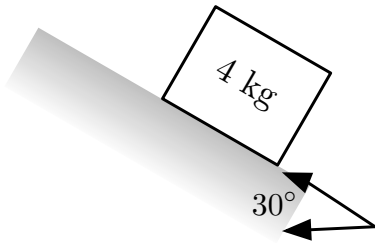
9. A mass (near the earth's surface) is suspended as depicted. Draw the free-body diagram.



10. A mass is suspended from a pulley. Draw the free-body diagram of the pulley.



11. A mass is on a ramp. Draw the free-body diagram of the mass.



12. A mass is suspended as shown. Draw the free-body diagram of the mass. Draw the FBD of the point where the 3 ropes meet.

