Warm up: An elevator suspended by a cable is moving upward and slowing to a stop. Which free-body diagram is correct?
A 80 kg man, wearing skis on snow (no friction), is pulled on level ground via a rope from a truck. The magnitude of the force from the truck 800 N and is directed at an angle of 30° above the horizontal. Which of the following FBD’s best represents the forces acting on the man.
A 80 kg man, wearing skis on snow (no friction), is pulled on level ground via a rope from a truck. The rope is directed at an angle of 30° above the horizontal. What minimum force must the truck apply to the man to lift him off the ground. (Use g = 10 m/s²)

1. \( F_T > 80 \text{ N} \)
2. \( F_T > 800 \text{ N} \)
3. \( F_T > 1600 \text{ N} \)
4. \( F_T > 2100 \text{ N} \)
5. \( F_T > 2400 \text{ N} \)
What is the direction of the friction on the block?

1. Towards the right
2. Downward
3. Upward
4. Not enough information
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