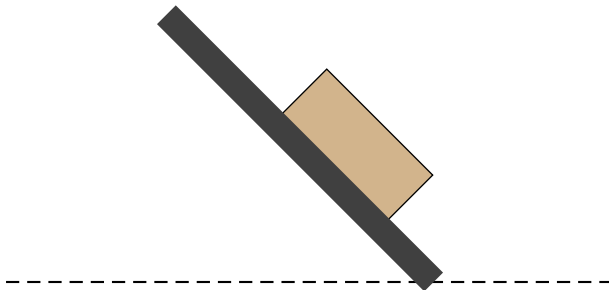
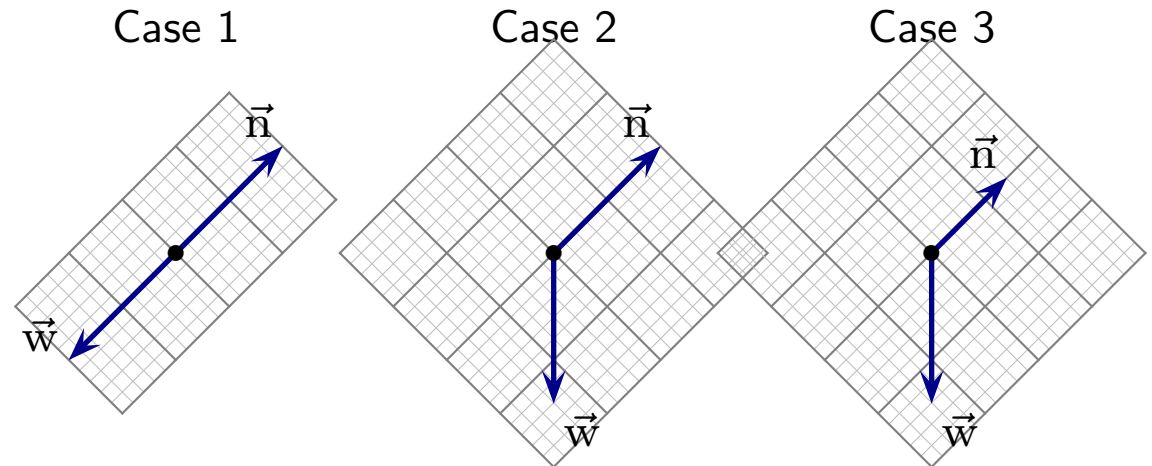


Question 1

A sled moves along the illustrated frictionless slope. Ignore air resistance.

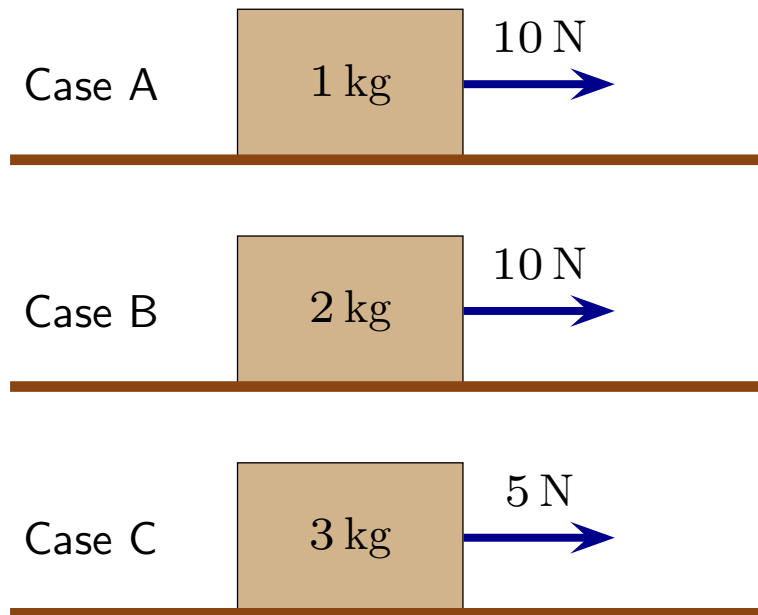


Which of the following is true of the free body diagram for this situation?



Question 2

Three boxes move horizontally while being pulled by people who exert constant forces horizontally.

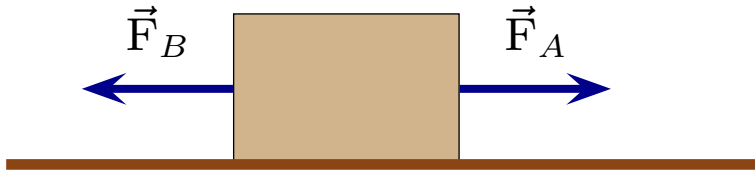


The blocks move right by distances $d_A = 1 \text{ m}$, $d_B = 1 \text{ m}$, $d_C = 2 \text{ m}$. Which of the following represents the ranking of the works done.

1. $W_A = W_B = W_C$
2. $W_C < W_A = W_B$
3. $W_A = W_B < W_C$
4. $W_A < W_B < W_C$
5. $W_A < W_C < W_B$

Question 3

Two forces pulled horizontally on a box, while the box *moves left*.



Let W_A be the work done by A and W_B be the work done by B. Which of the following is true?

1. W_A is positive. W_B is positive.
2. W_A is positive. W_B is negative.
3. W_A is negative. W_B is positive.
4. W_A is negative. W_B is negative.