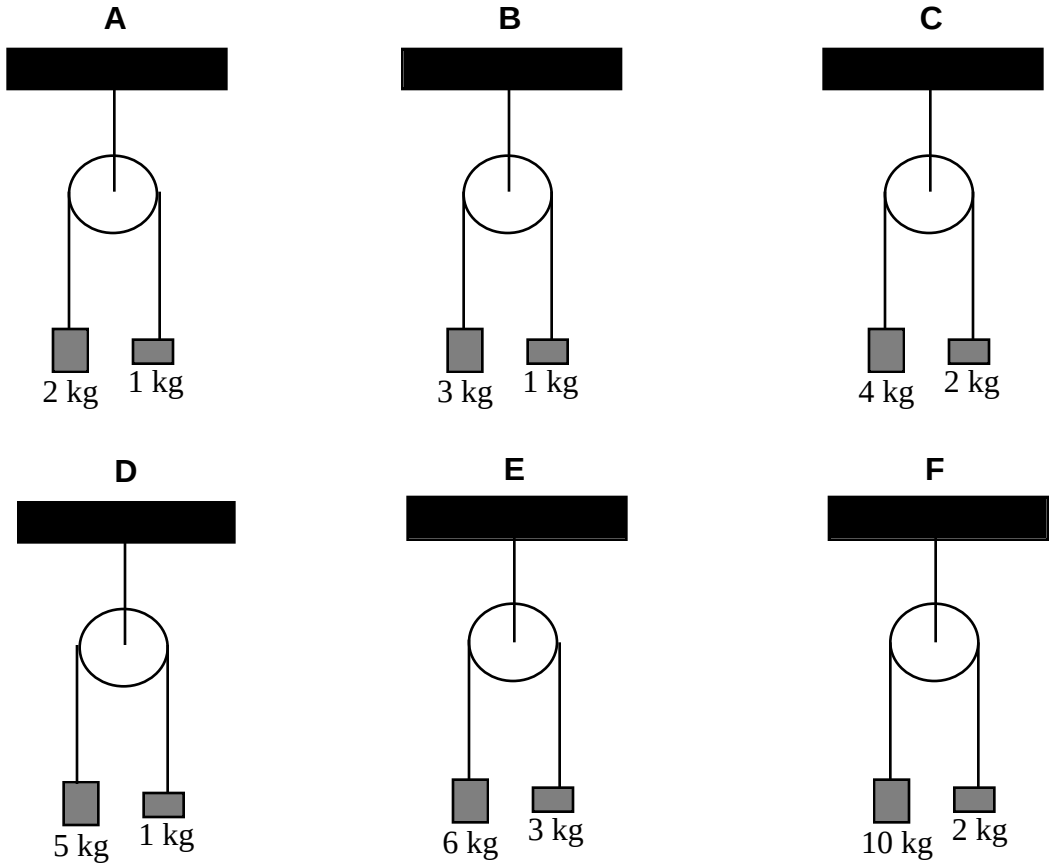
## Two Different Blocks and a Pulley—Tension [25]

Each figure below shows two blocks hanging from the ends of a strong but massless string that passes over a frictionless pulley. In each figure, the block on the left is more massive than the block on the right, so the block on the left accelerates down, and the block on the right accelerates up. The mass of each block is given in the figures.

Rank the figures from greatest to least on the basis of the tension in the string for the system of blocks.




Greatest 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ Least

Or, all of the tensions will be the same. _____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

| Basically Guessed | | | | Sure | | | | | Very Sure |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

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