Q1 - Answer = c Q2 - Problem A - Last name A-K

Two masses, 3 kg and 5 kg, connected by a rope, are accelerated on a frictionless surface by a rope attached to one of them. If their acceleration is 2 m/s what is the tension in the rope connecting them?



a. 2 N

b. 3 N

c. 6 N

<u>**d.** 10 N</u> $F = T = ma = 5kg x 2m/s^2 = 10N$

e. 16 N

Q1 - Answer = c Q2 - Problem B - Last Na me L-Z

Two masses, 2 kg and 7 kg, connected by a rope, are accelerated on a frictionless surface by a rope attached to one of them. If their acceleration is 3 m/s what is the tension in the rope connecting them?



a. 21 N
$$F = T = ma = 7kg \times 3 m/s^2 = 21 N$$

- b. 6 N
- c. 27 N
- d. 7 N

e. 15 N