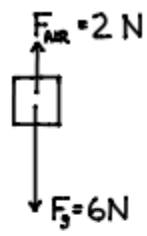


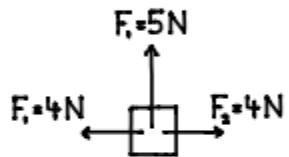
Net Force

I. a)



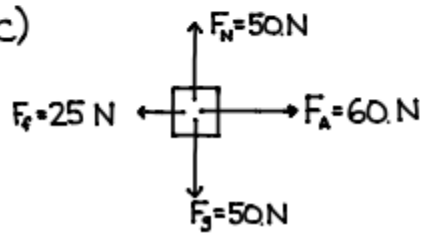
$$F_{\text{NET}} = 4\text{ N DOWN}$$

b)



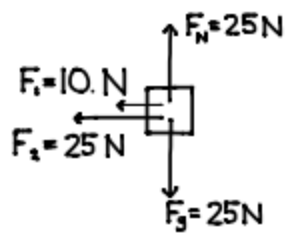
$$F_{\text{NET}} = 5\text{ N UP}$$

c)



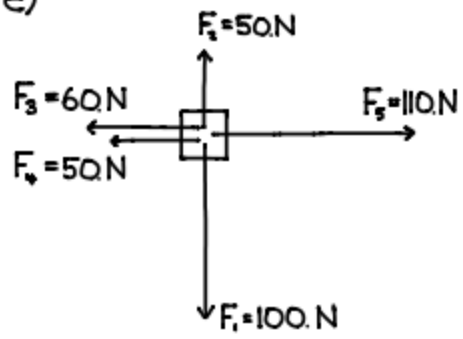
$$F_{\text{NET}} = 35\text{ N RIGHT}$$

d)



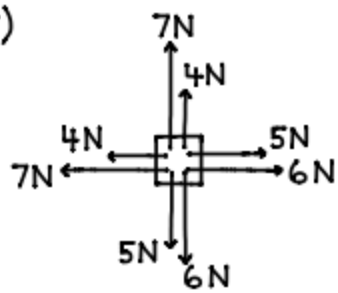
$$F_{\text{NET}} = 35\text{ N LEFT}$$

e)



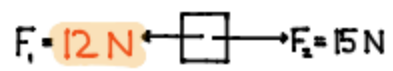
$$F_{\text{NET}} = 50\text{ N DOWN}$$

f)

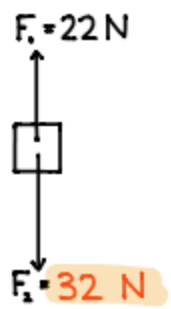


$$F_{\text{NET}} = 0$$

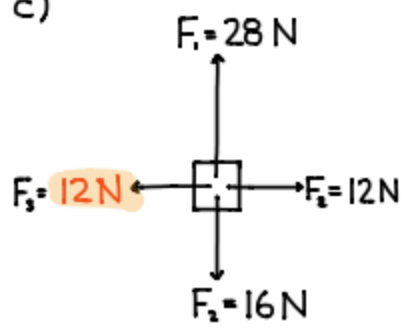
2. a)



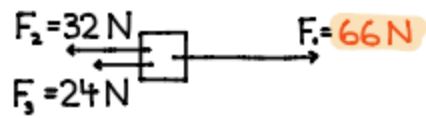
b)



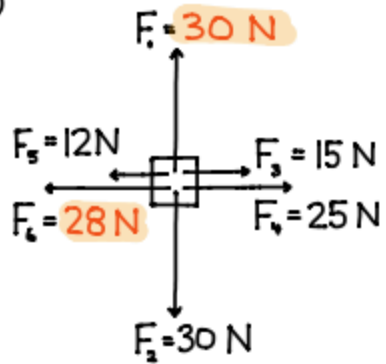
c)



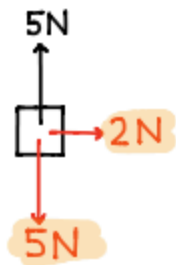
d)



e)



f)



OTHER POSSIBLE
SOLUTIONS

Newton's Second Law

1. 85 N Right

2. 6.5 m/s^2 Right

3. 10 N Left

4. 7.8 m/s^2 downward

5.a) 14 m/s^2

b) 12 m/s^2

6. 11.0 m/s^2 Up

7.

a) 80.0 kg

b) 780 N

c) Ajay will move at a constant velocity (1st law) after the push ends

8. 4.8 m/s² downward

9. 1,200 N

10. 0.53 m/s² Right

11. 1,070 N Left

Friction

1. 2.3 m/s² Right

2. 0.66

3. 810 N

4.

a) 15 N

b) 11 N

5. 5.1 kg

6.

a) 5.6 m/s² right

b) 1.8 m/s² right

c) 3.9 m/s² right

7. 2.8 s

8. 0.076