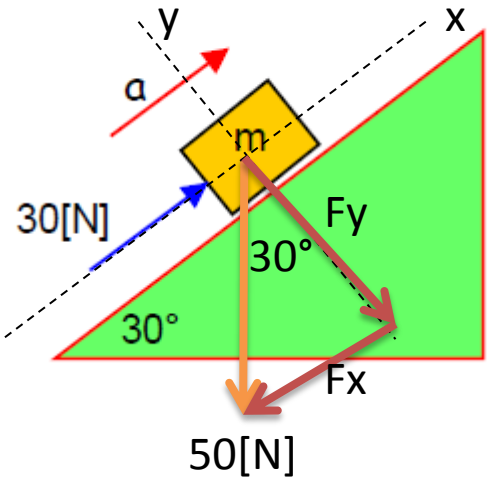
30. Hallar la aceleración del bloque. Si m=5 [kg].



A) 1 [m/s²]
B) 2 [m/s²]
C) 3 [m/s²]
D) 4 [m/s²]
E) NA.

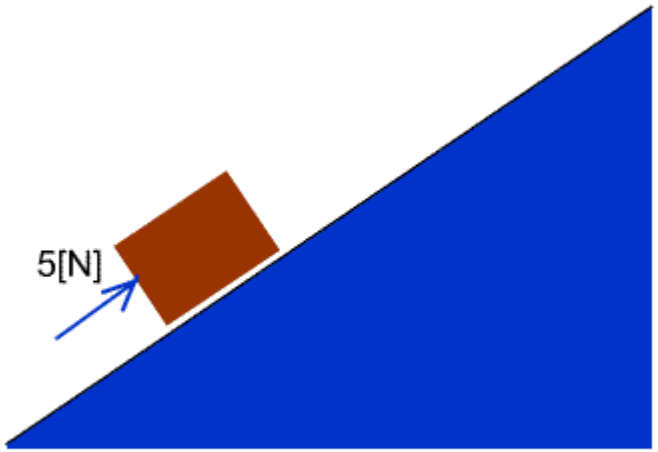
$$F_x = 50\, sen\, 30° = 25[N]$$

$$\Sigma F_x = m\, a$$

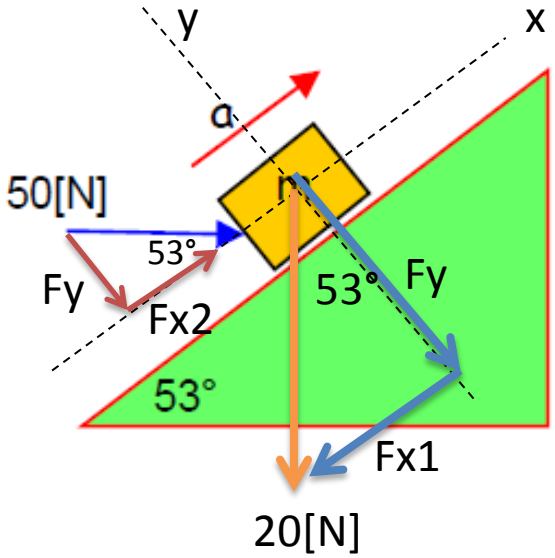
$$30 - 25 = 5\, a$$

$$5 = 5\, a$$

$$a = 1[m/s^2]$$



31. Hallar la aceleración del bloque. Si m=2 [kg].



A) 7 [m/s²]
B) 8 [m/s²]
C) 9 [m/s²]
D) 10 [m/s²]
E) NA.

$$F_{x1} = 20\, sen\, 53° = 16[N]$$

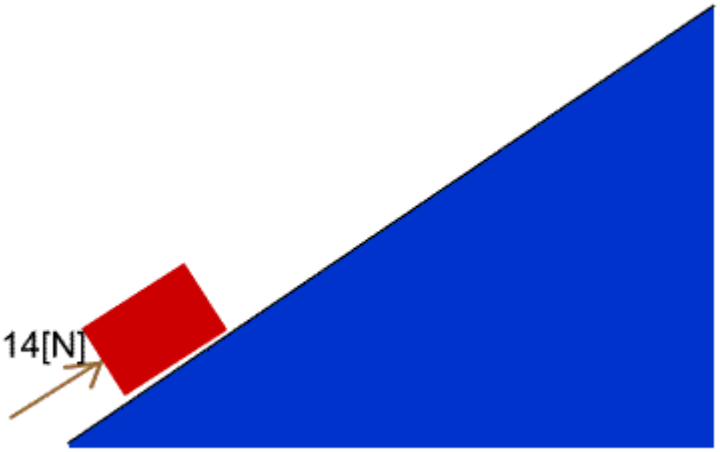
$$F_{x2} = 50 \cos 53° = 30[N]$$

$$\Sigma F_x = m\, a$$

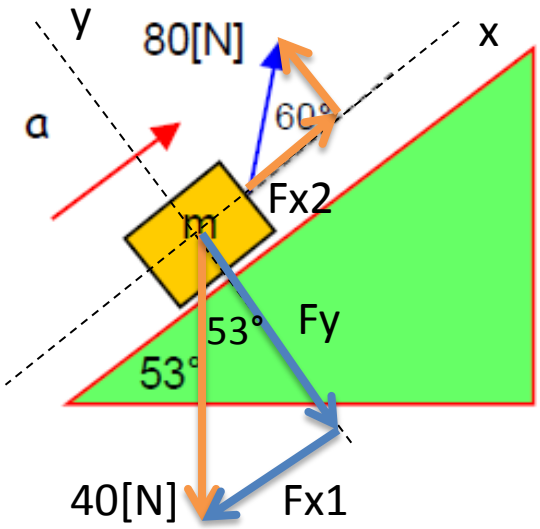
$$30 - 16 = 2\, a$$

$$14 = 2\, a$$

$$a = 7\,[m/s^2]$$



32. Hallar la aceleración del bloque. Si m=4 [kg].



A) 1 [m/s²]
B) 2 [m/s²]
C) 3 [m/s²]
D) 4 [m/s²]
E) NA.

$$F_{x1} = 40\, sen\, 53° = 32[N]$$

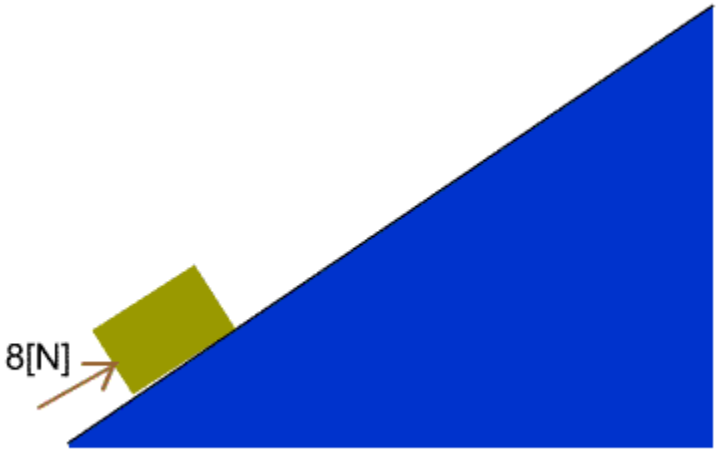
$$F_{x2} = 80 \cos 60° = 40[N]$$

$$\Sigma F_x = m\, a$$

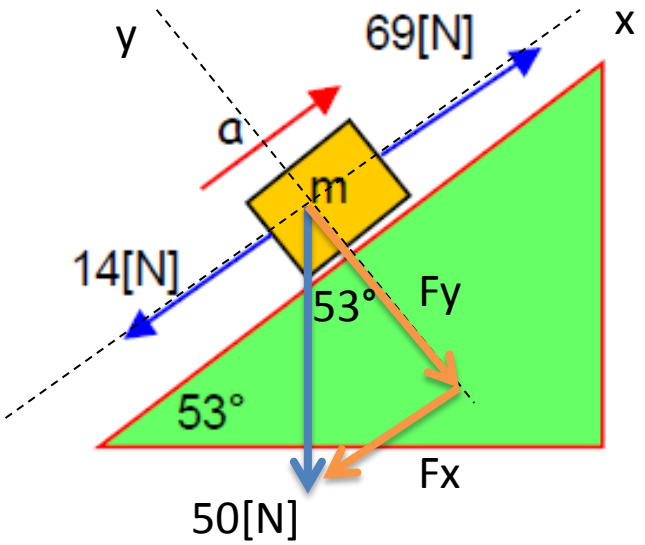
$$40 - 32 = 4\, a$$

$$8 = 4\, a$$

$$a = 2[m/s^2]$$



33. Hallar la aceleración del bloque. Si m=5 [kg].



A) 1 [m/s²]
B) 2 [m/s²]
C) 3 [m/s²]
D) 4 [m/s²]
E) NA.

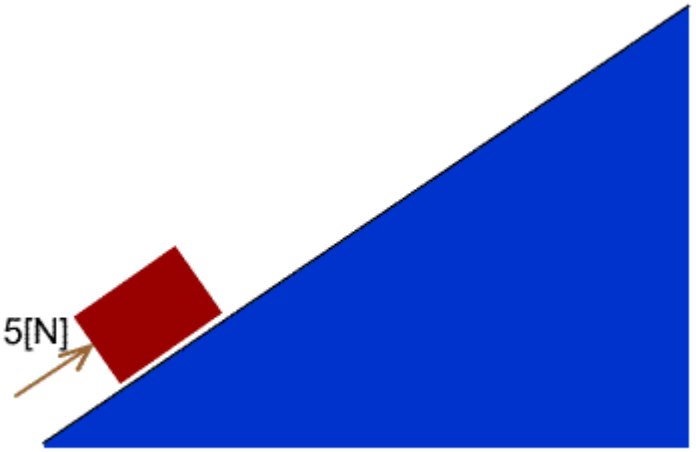
$$F_x = 50\, sen\, 53° = 40[N]$$

$$\Sigma F_x = m\, a$$

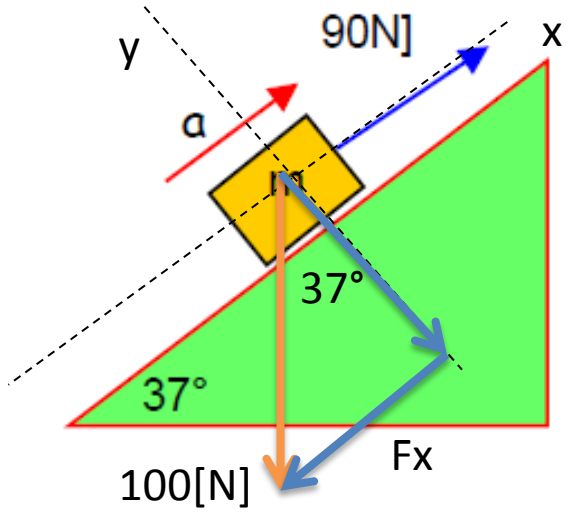
$$69 - 14 - 40 = 5\, a$$

$$15 = 5\, a$$

$$a = 3[m/s^2]$$



34. Hallar la aceleración del bloque. Si m=10 [kg].



A) 3 [m/s²]
B) 5 [m/s²]
C) 7 [m/s²]
D) 9 [m/s²]
E) NA.

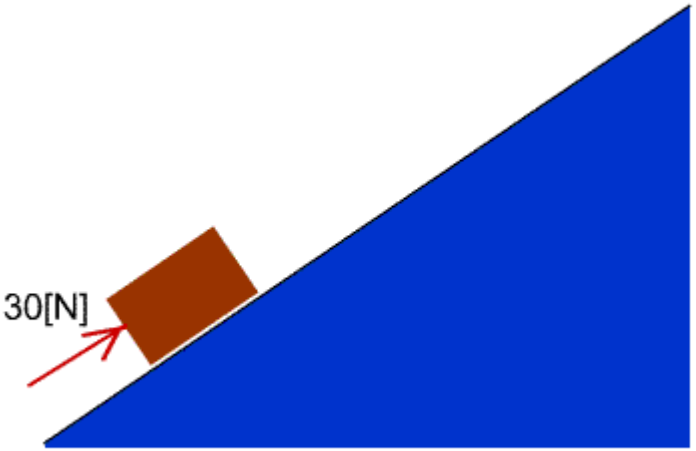
$$F_x = 100\ sen\ 37° = 60[N]$$

$$\Sigma F_x = m\,a$$

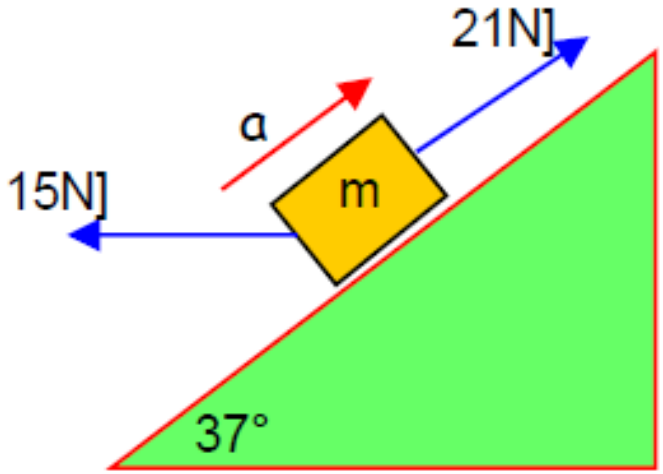
$$90 - 60 = 10\,a$$

$$30 = 10\,a$$

$$a = 3[m/s^2]$$



35. Hallar la aceleración del bloque. Si m=10 [kg].



A) 1 [m/s²]
B) 2 [m/s²]
C) 3 [m/s²]
D) 4 [m/s²]
E) NA.

FIN

JORGE CABRERA