Name_____

Favorite Book_____

Show your equations of equilibrium, and circle your answers and use sig figs to receive full credit.

1. Find the **E**quilibrant (The third force that would cause translational equilibrium) – express it as an angle magnitude vector. Draw it with its tail on the origin, and label its magnitude, and an angle with one of the axes.   Write your answer with 3 sig figs, but carry at least 4 so you don't make rounding errors.
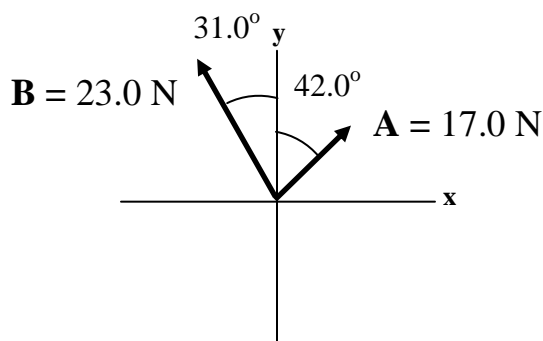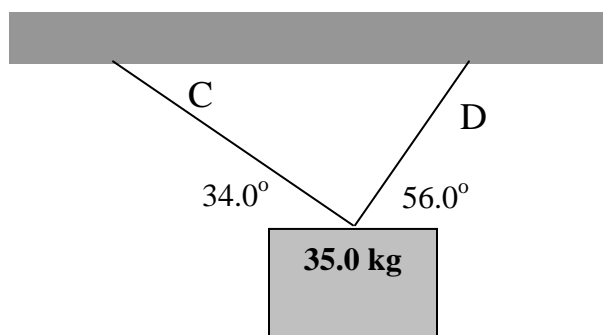
Draw your picture here:

31.0^o y

B = 23.0 N

42.0^o

A = 17.0 N

x
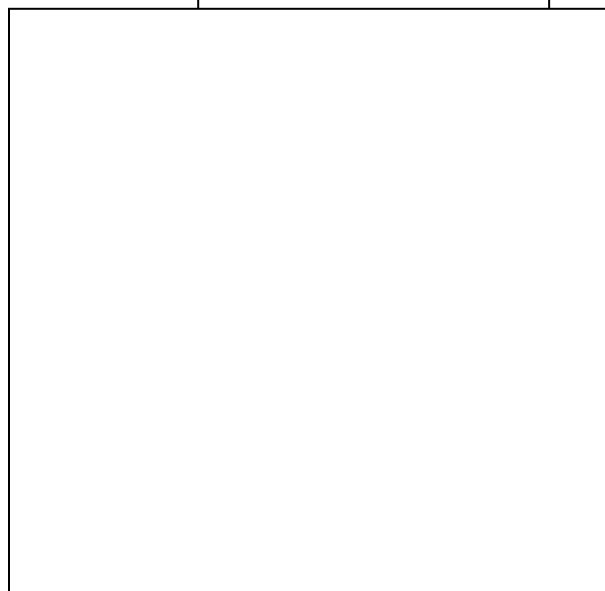
X:

Y:

2. Find the tensions in the cables C and D. Set up your x and y equations where indicated and solve.

C

D

34.0^o

56.0^o

35.0 kg

X:

Y: