```
% Forces in the x-direction

Bx = 0;

% Forces in the y-direction

By = 150; %pounds, reaction
Ay = -20; %pounds, reaction
F1 = -40; %pounds, applied force
F2 = -50; %pounds, applied force
F3 = -30; %pounds, applied force
F4 = -10; %pounds, applied force

% Distance between each applied force in the x-direction, beginning at point A

x1 = 6; %inches
x2 = 6; %inches
x3 = 10; %inches
x4 = 8; %inches

%Begin calculations

%sum of forces in the x direction

Bx = 0;

%sum of forces in the y direction

SumFy = Ay + By + F1 + F2 +F3 + F4

%sum of moments about point A

SumM = F1*x1 + F2 * (x1 + x2) + F3 * (x1 + x2 +x3) + F4 * (x1 + x2 + x3 + x4) + By * ↙
(x1 +x2)
```