

Exhibit 7.12

- 7.13** The plumber in Exhibit 7.13 exerts a vertical downward force of 1 kN on the wrench handle. The moment about C of this force has a magnitude of
- | | |
|------------|-------------|
| a. 500 N•m | c. 900 N•m |
| b. 750 N•m | d. 1250 N•m |

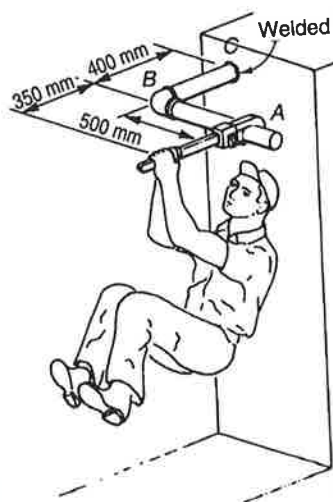


Exhibit 7.13

- 7.14** The moment about the axis CB of the previous problem has a magnitude of
- | | |
|------------|-------------|
| a. 500 N•m | c. 900 N•m |
| b. 750 N•m | d. 1250 N•m |
- 7.15** The brake is set on the wheel in Exhibit 7.15, and it will not slip until the moment about the center of the wheel of forces acting on the lug wrench reaches 150 N•m. Will the brake slip?
- | | |
|-------------------|-------------------|
| a. 147.2 N•m; No | c. 1335.6 N•m; No |
| b. 156.6 N•m; Yes | d. 313.2 N•m; Yes |

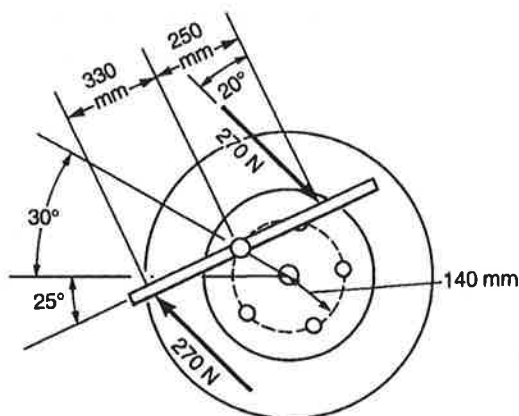


Exhibit 7.15

- 7.16 The tension in the vertical line AC is 2 kN and that in the line BC is 6 kN (see Exhibit 7.16). The magnitude of the resultant force exerted by the two lines at C is

- a. 8.0 kN c. 4.0 kN
b. 6.8 kN d. 6.3 kN

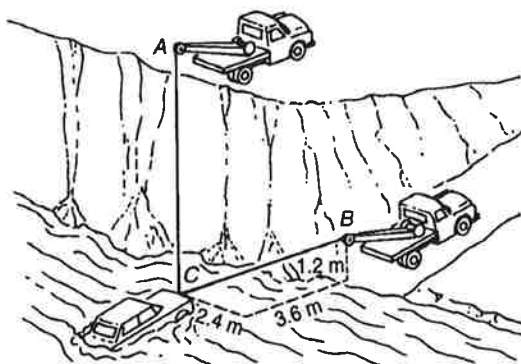


Exhibit 7.16

- 7.17 The moment of \mathbf{f} about the axis AB in Exhibit 7.17 has the magnitude

- a. $(144/65 \text{ m})f$ c. $(29/13 \text{ m})f$
b. $(12/5 \text{ m})f$ d. $(12 \text{ m})f$

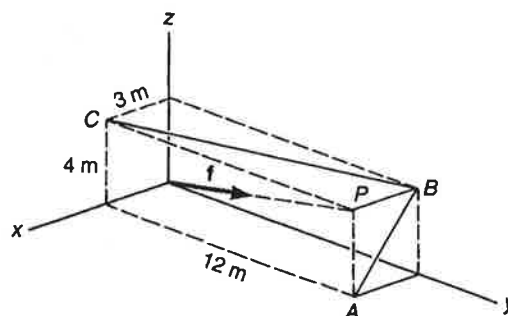


Exhibit 7.17