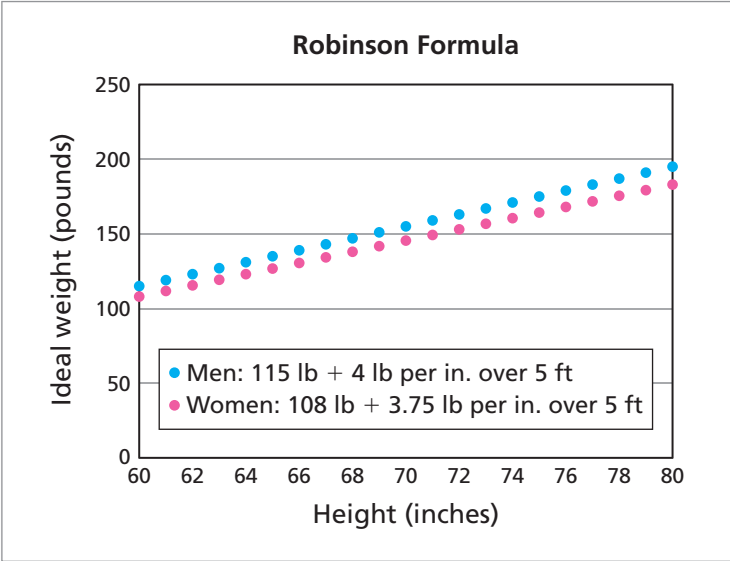


# 10.1 Exercises

**The Robinson Formula** In 1983, Dr. J.D. Robinson published a formula for ideal weight. In Exercises 1–6, use the formula. (See Example 1.)



- Find the ideal weight of a woman who is 5 feet 2 inches tall.
- Find the ideal weight of a man who is 5 feet 3 inches tall.
- Find the ideal weight of a man who is 6 feet tall.
- Find the ideal weight of a woman who is 6 feet 4 inches tall.
- How do you think you should calculate the ideal weight of a person who is shorter than 5 feet tall? Explain your reasoning. Then find the ideal weight of a woman who is 4 feet 8 inches tall.
- Compare the ideal weights for men and women given by the Robinson formula.



**Body Fat Percentage** In Exercises 7 and 8, find (a) the body fat percentage and (b) the body mass index for the person shown. (See Example 2.)

7.



Weight: 160 lb  
Waist: 34 in.  
Age: 21 yr

8.



Weight: 125 lb  
Wrist: 4.5 in.  
Waist: 24 in.  
Hips: 30 in.  
Forearm: 7 in.  
Age: 18 yr