

5. a) about 15%                      b) 5.9%
6. about 1.7%
7. \$687.62
8. \$2301.43
9. a) \$575.00/week                  b) \$470.27/week  
c) 8.3%

**PRACTISE YOUR NEW SKILLS, P. 113**

1. a) \$1098.84                      b) \$2211.96
2. about 23%
3. \$790.21

**CHAPTER TEST, P. 114**

4. \$12.54/h
5. \$19 500.00
6. \$42 816.00
7. The second job would pay \$40.00 more per year.
8. 3%
9. \$281.20
10. \$186.30
11. \$873.75
12. \$75.87
13. \$3274.16
14. \$38.73
15. a) \$985.80                      b) \$24.65/h

**CHAPTER 3****LENGTH, AREA, AND VOLUME****3.1 SYSTEMS OF MEASUREMENT****BUILD YOUR SKILLS, P. 120**

1. a) 53.6 cm                      b) 43.6 cm  
c) 7.6 m
2. 780 cm
3. 240 m
4. 122 ft
5. about 33.3 m
6. 104 m
7. 1099.5 cm
8. Bernard needs  $13\frac{1}{2}$  ft of 2 by 4 lumber and  $52\frac{1}{2}$  ft of 2 by 2 lumber.
9. 12 ft
10. 740 boards
11. The cages will not fit along a 30' wall. They are 2" too wide.
12. The garden circumference is about 20 feet, so Gordon will need 20 geraniums.
13. The height of the pipe is 6'7". Craig is 6'6" tall, so he will be able to walk under the finished pipe.

**PRACTISE YOUR NEW SKILLS, P. 129**

1. a)  $3\frac{1}{2}$  feet                      b) 1 ft 4 in  
c)  $2\frac{2}{3}$  yards                      d) 8800 yards

2. 34'4"
3. 65'2"
4. 64 packages
5. 11.4 blocks

### 3.2 CONVERTING MEASUREMENTS

#### BUILD YOUR SKILLS, P. 132

1. 760 sq ft
2. The diameter of the rug is 2.4 m; this is less than the dimensions of the space Travis wants to cover, so the rug will fit into the space.
3. The label is 28.3 cm long.
4. 20.3 cm by 10.2 cm
5. \$2227.14
6. a) \$28.56/linear yard  
b) \$31.73/linear metre  
c) \$123.75
7. \$554.82
8. a) 27 boxes                      b) \$511.65
9. \$1072.85

#### PRACTISE YOUR NEW SKILLS, P. 139

1. a) 132 inches                      b) 11 feet  
c) 3 yd 2 ft
2. 387.5 mi
3. 45 m by 25.5 m

4. The height of the semi-trailer is 10 ft 8.4 in. It will not fit through the tunnel.
5. \$38.14
6. 10.5 lb
7. \$643.72

### 3.3 SURFACE AREA

#### BUILD YOUR SKILLS, P. 145

1. 468 sq in
2. 66 sq ft
3. 11 305 sq in
4. a) 959 sq in                      b) 6.7 sq ft
5. 149.2 sq in
6. 1.4 sq ft
7. 374 sq ft
8. 214.2 sq in
9. 112.7 sq ft
10. \$1234.80
11. \$1312.85
12. \$179.70

#### PRACTISE YOUR NEW SKILLS, P. 155

1. 35.3 sq ft
2. 36 sq ft
3. 50 of the 39 cm by 39 cm tiles would be needed. 155 of the 18 cm by 27 cm tiles would be needed.

4. 47.3 sq in
5. 11.8 in by 7.5 in
6. 14.7 sq in
7. 922 320 sq ft

### 3.4 VOLUME

#### BUILD YOUR SKILLS, P. 159

1. a) 12 960 in<sup>3</sup>      b) 7.5 ft<sup>3</sup>
2. 11.25 ft<sup>3</sup>
3. Volume of box: 72 in<sup>3</sup>. Volume of cube: 64 in<sup>3</sup>.  
The contents of the box will not fit in the cube.
4. 3 bags
5. 1875 cubic feet
6. 4446 in<sup>3</sup>
7. a) 14.5 US gallons    b) \$43.36  
c) \$120.29
8. 2675 ft<sup>3</sup>
9. 6.2 ft

#### PRACTISE YOUR NEW SKILLS, P. 166

1. a) 72 cubic feet      b) 2.7 cubic yards
2. 687.5 mL
3. 150 mL
4. 10.4 US gallons
5. Fav will need about 4.7 L of fertilizer, so he will need 2 bottles.
6. \$366.12

### CHAPTER TEST, P. 169

1. a) 6 ft 6.4 in  
b) Robert Pershing Wadlow: about 2.7 m;  
He Pingping: about 0.7 m.  
c) 2 m
2. Height of tunnel: 3.15 m. Franklin's truck is higher than that, so it will not fit through the tunnel.
3. 7 panels
4. a) 129 tiles      b) 47 geraniums
5. 2.3 gallons (likely rounded up to 3 gallons)
6. 354.8 sq ft
7. Soccer field dimensions: 118.8 yd by 79.6 yd.  
Yes, it does fit the league's specifications.
8. 158 400 cm<sup>3</sup>
9. 2.7 cubic yards
10. 1 US gal = 3800 mL; 0.5 US gal = 1900 mL;  
1 quart = 950 mL; 0.5 pint = 237.5 mL
11. a)  $\frac{5}{8}$  cup or 0.625 cup  
b) 125 mL