

## MODULE 20 Arc Length and Sector Area

### LESSON 20-1

#### Practice and Problem Solving: A/B

- $50\pi$  m
- $42\pi$  in.
- $100\pi$  yd<sup>2</sup>
- $360,000\pi$  mi<sup>2</sup>
- 1 cm
- 8 m
- nickel:  $353.0$  mm<sup>2</sup>; dime:  $248.8$  mm<sup>2</sup>;  $471.4$  mm<sup>2</sup>
- nickel:  $0.01$  cent/mm<sup>2</sup>; dime:  $0.04$  cent/mm<sup>2</sup>; quarter:  $0.05$  cent/mm<sup>2</sup>
- nickel

### LESSON 20-2

#### Practice and Problem Solving: A/B

- $\pi$  ft;  $3.14$  ft
- $14\pi$  m;  $43.98$  mm<sup>2</sup>
- $\frac{8\pi}{3}$  cm;  $8.38$  cm
- $6\pi$  in.;  $18.85$  in.
- $\frac{\pi}{2}$  mi;  $1.57$  cm
- $10\pi$  in.;  $31.42$  in.
- $6.3$  in.
- $13.4$  in.
- $\frac{\pi}{18}$
- $\frac{5\pi}{4}$
- $\frac{4\pi}{5}$
- $\frac{5\pi}{18}$

### LESSON 20-3

#### Practice and Problem Solving: A/B

- $126\pi$  mm<sup>2</sup>;  $395.84$  mm<sup>2</sup>
- $30\pi$  in<sup>2</sup>;  $94.25$  mm<sup>2</sup>
- $\pi$  ft<sup>2</sup>;  $3.14$  ft<sup>2</sup>
- $100\pi$  m<sup>2</sup>;  $314.16$  m<sup>2</sup>
- $4.54$  in<sup>2</sup>
- $10.96$  km<sup>2</sup>
- $24.47$  yd<sup>2</sup>
- $0.29$  cm<sup>2</sup>
- $9.83$  mi<sup>2</sup>