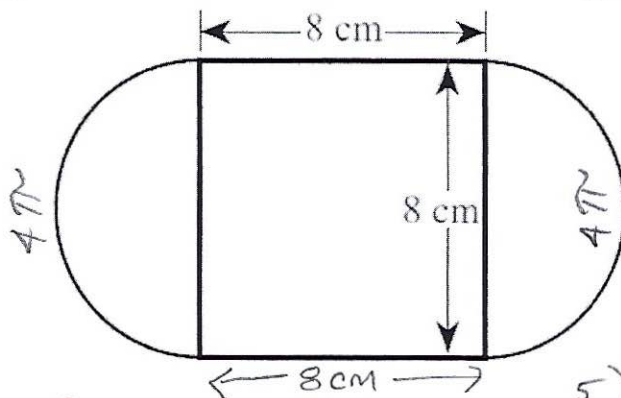Answer Key

37. The figure below consists of a square and 2 semicircles, with dimensions as shown. What is the outside perimeter, in centimeters, of the figure?

- A. $8 + 8\pi$
- B. $16 + 8\pi$
- C. $16 + 16\pi$
- D. $32 + 8\pi$
- E. $32 + 16\pi$

1) $C = \pi d$

2) $C = \pi 8$

3) $C = 8\pi$

4) $\dfrac{8\pi}{2} = 4\pi$

5) $4\pi + 4\pi + 8 + 8$
   $= 16 + 8\pi$

The **ACT**

175

33. The circumference of a circle is 20 cm. What is the length, in centimeters, of the *radius* of the circle?

- A. π
- B. $\dfrac{10}{\pi}$
- C. $\dfrac{20}{\pi}$
- D. 20

1) $C = \pi d$

2) $20 = \pi d$

3) $\dfrac{20}{\pi} = \dfrac{\pi d}{\pi}$

4) $20\pi = d$

5) $\dfrac{d}{2} = r$

6) $\dfrac{20\pi}{2} = \dfrac{d}{2}$

7) $10\pi = r$

The **ACT**

176

1