

Circumference of a Circle

7th Grade

The distance around, and the two formulas that are the same formula.

The circumference is pi times the diameter — and the diameter is twice the radius.

$$C = \pi d = 2\pi r$$

$$r = 5$$

$$2 \times 3.14 \times 5.$$

$$C \approx 31.4$$

$$d = 10$$

$$3.14 \times 10. \text{ Same circle.}$$

$$C \approx 31.4$$

$$C = 62.8, \text{ find } r$$

$$62.8 \div (2 \times 3.14).$$

$$r = 10$$

Semicircle perimeter

Half the circumference plus the straight edge.

$$\pi r + 2r$$

THE COMMON MISTAKE

× $C = 2\pi d$

✓ $C = \pi d$ or $C = 2\pi r$

Using both the 2 and the diameter doubles the answer.

π is the same for every circle — circumference divided by diameter is always about 3.14.