

7.G.4: Worksheet

1. What's the area of a circle with a diameter of 24 in?

2. What's the area of a circle with a diameter of 5 m?

3. Jamie lives in a super weird house—her bedroom is in the shape of a semicircle. She needs to buy new carpet for the whole room. If her straight wall is 14 feet long, how much carpet will she need?

4. What's the radius of a circle with a circumference of 15π cm?

5. What's the area of a circle with a circumference of 12π in?

6. What's the circumference of a circle with an area of 9 ft^2 ?

7. What's the perimeter of the shape in Figure 1?

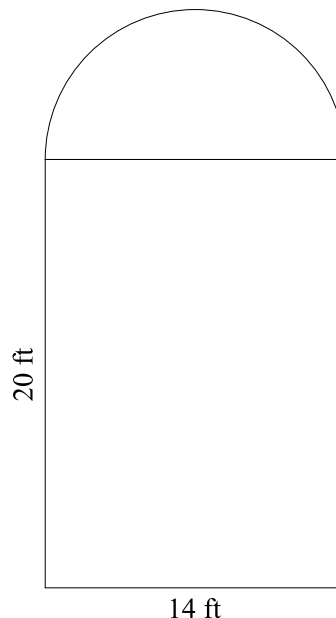


Figure 1.

8. Tom accidentally burned a perfectly circular black spot into his wall when he lost control of a frying pan. If the burn mark is exactly 18π inches around its outside, how much paint will he need to cover the whole thing?

9. If a circular porthole on a ship uses $49\pi\text{ in}^2$ of glass, how far across is the porthole?

10. What's the perimeter of a semicircle with a diameter of 32 m?