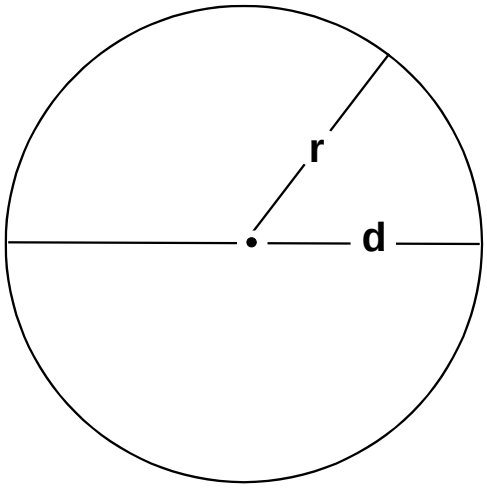
## Activity 13

# Circle Around

Name _____

Date _____




**d = 2 r** **C = π d = 2 π r** **A = π $r^2$**

Find the circumference and area of each circle. Write each answer with a reasonable number of decimal digits and explain why you chose to write only that many digits.

1. r = 6 cm

2. r = 7.8 ft

3. d = 300 cm

4. d = 31.4 yd

For each circle, find the radius to the nearest cm.

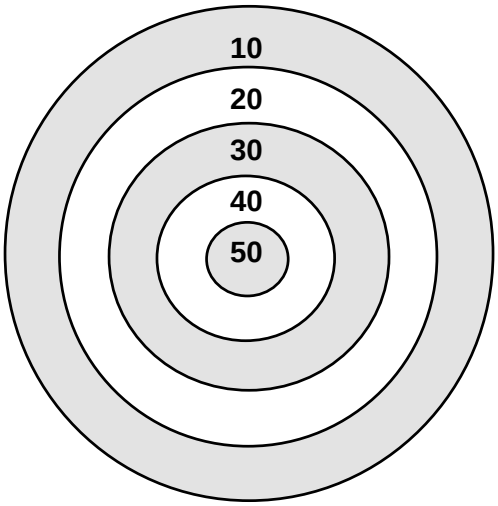
5. C = 68 in

6. C = 1024 cm

7. A = 500 $in^2$

8. A = 3875 $cm^2$

The target below is 10 feet in diameter. The inside 50-point circle is 2 feet in diameter. Each ring is 1 foot wide. Point values for each ring are listed.




9. What is the area of the bull's-eye?

10. What proportion of the area of the target is the bull's-eye?

11. What is the area of the 10-point ring?

12. What is the total area of all of the *shaded* rings (including the bull's-eye)?

13. What proportion of the area of the target is shaded?

14. What proportion of the area of the target is *not* shaded?

15. Is an archer more likely to score 40 points with two arrows by scoring 10 first and 30 second or by scoring 20 with both arrows? Explain your reasoning.