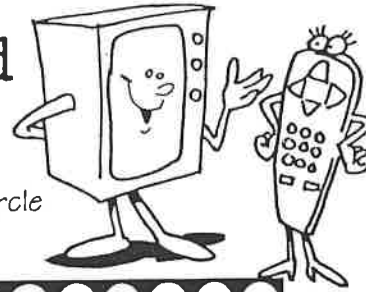


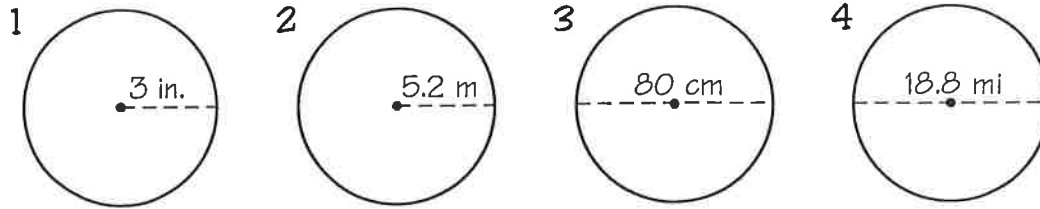
12.5

# What Happened When the TV Set Asked the Remote Control for a Date?



Find each answer in the answer column. Write the letter of the answer in the circle that contains the exercise number. Most answers are rounded. Use 3.14 for  $\pi$ .

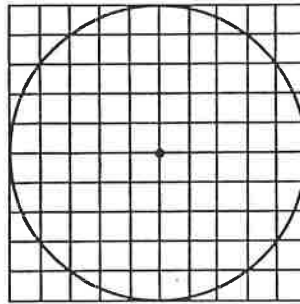
Use the diameter ( $d$ ) or radius ( $r$ ) to find the area.



- 5  $r = 12$  in.      6  $r = 0.66$  mi      7  $d = 7.5$  m.      8  $d = 2$  cm

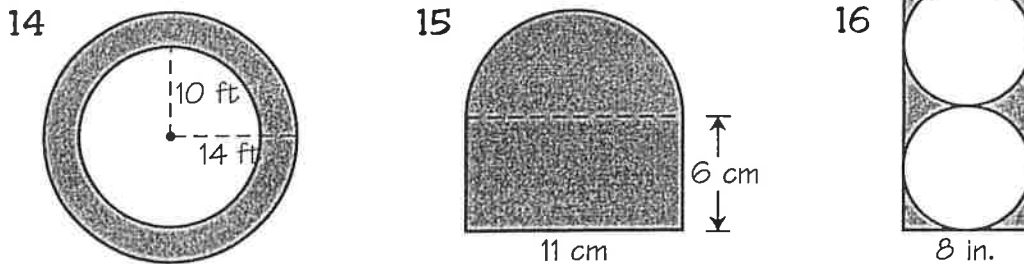
Solve.

- 9 Radio station KLVU broadcasts in all directions to a distance of 60 mi. What is the area over which the station can be heard?
- 10 How many squares are inside the circle below?



- 11 A fugitive has escaped in a train wreck. The police believe he could not have traveled more than 7 mi in any direction from the wreck. How many square miles must be searched?
- 12 A manhole cover has a diameter of 3 ft. It weighs 8.2 lb per square foot. How much does the manhole cover weigh?
- 13 A 12-inch diameter pizza is cut into 8 equal pieces. What is the area of each piece?

Find the area of the shaded region.

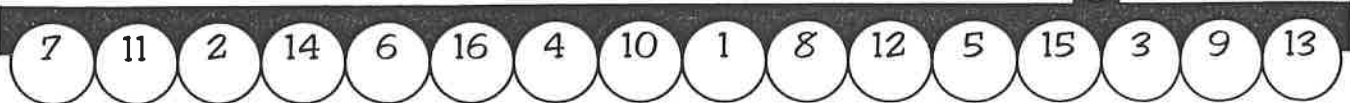


Answers 1-8

- L 269.4 mi<sup>2</sup>
- O 5024 cm<sup>2</sup>
- S 44.2 m<sup>2</sup>
- D 28.3 in.<sup>2</sup>
- F 1.54 mi<sup>2</sup>
- M 452.2 in.<sup>2</sup>
- T 5196 cm<sup>2</sup>
- E 84.9 m<sup>2</sup>
- H 3.14 cm<sup>2</sup>
- A 48.3 m<sup>2</sup>
- U 1.37 mi<sup>2</sup>
- Y 438.3 in.<sup>2</sup>
- N 277.5 mi<sup>2</sup>

Answers 9-16

- S 124.3 cm<sup>2</sup>
- H 153.9 mi<sup>2</sup>
- A 62.4 lb
- T 301.4 ft<sup>2</sup>
- F 18.9 in.<sup>2</sup>
- E 78.5
- I 57.9 lb
- D 113.5 cm<sup>2</sup>
- L 82.4
- W 11,304 mi<sup>2</sup>
- R 27.5 in.<sup>2</sup>
- B 326.4 ft<sup>2</sup>
- N 14.1 in.<sup>2</sup>
- O 9285 mi<sup>2</sup>



## 12.5 Area of Circles

**Find the diameter of each circle. Use your calculator's value of  $\pi$ . Round your answer to the nearest tenth.**

1) area =  $283.5 \text{ km}^2$

2) area =  $55.4 \text{ km}^2$

3) area =  $201.1 \text{ km}^2$

4) area =  $52.8 \text{ mi}^2$

**Find the circumference of each circle. Use your calculator's value of  $\pi$ . Round your answer to the nearest tenth.**

5) area =  $153.9 \text{ cm}^2$

6) area =  $314.2 \text{ ft}^2$

## 12.5 What Happened When the TV Set Asked the Remote Control for a Date?

For full credit, you need to show at least 3 steps for each problem.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

