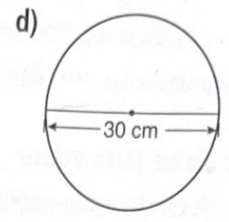
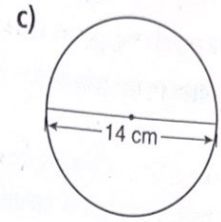
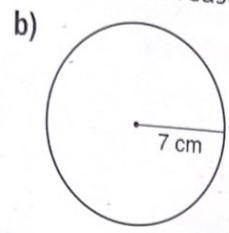
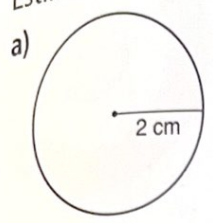
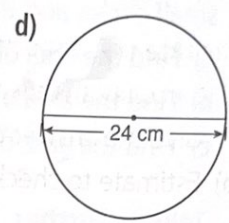
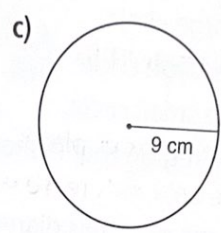
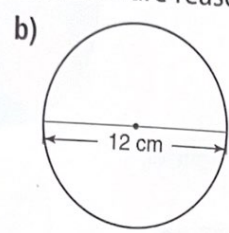
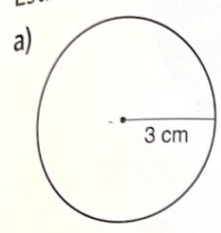


Practice

1. Calculate the area of each circle.
Estimate to check your answers are reasonable.



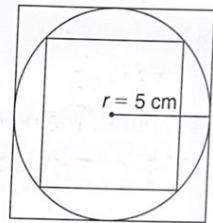
2. Calculate the area of each circle. Give your answers to two decimal places.
Estimate to check your answers are reasonable.



3. Use the results of questions 1 and 2. What happens to the area in each case?
a) You double the radius of a circle.
b) You triple the radius of a circle.
c) You quadruple the radius of a circle.
Justify your answers.

4. **Assessment Focus** Use 1-cm grid paper.

- Draw a circle with radius 5 cm.
- Draw a square outside the circle that just encloses the circle.
- Draw a square inside the circle so that its vertices lie on the circle.
- Measure the sides of the squares.



- a) How can you use the areas of the two squares to estimate the area of the circle?
- b) Check your estimate in part a by calculating the area of the circle.
- c) Repeat the activity for circles with different radii.
Record your results. Show your work.

5. In the biathlon, athletes shoot at targets. Find the area of each target.
- a) The target for the athlete who is standing is a circle with diameter 11.5 cm.
 - b) The target for the athlete who is lying down is a circle with diameter 4.5 cm.
- Give the answers to the nearest square centimetre.

