

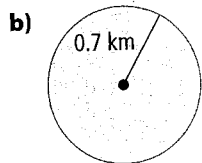
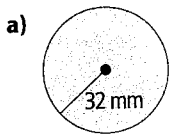
Practise

Use 3.14 for π in calculations.

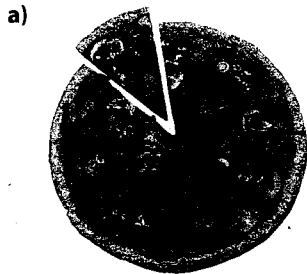
Round all answers to the nearest tenth of a unit unless otherwise specified.

For help with #4 to #7, refer to Example 1 on page 282.

4. Estimate and then calculate the area of each circle.



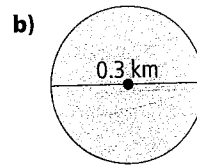
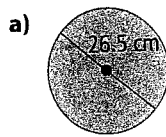
5. Estimate and then calculate the area of each circle.



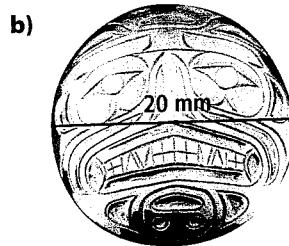
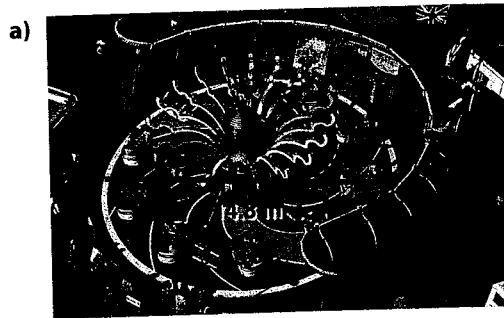
6. A sprinkler shoots out a jet of water 6 m as it spins around. What is the area of lawn that can be watered by the sprinkler?
7. A circular porthole on a ship has a radius of 21 cm.
- What is the area of the porthole to the nearest tenth of a square centimetre?
 - The radius of the porthole expressed in metres is 0.21 m. What is the area of the porthole to the nearest tenth of a square metre?

For help with #8 to #11, refer to Example 2 on page 283.

8. What is the area of each circle?



9. What is the area of each circle?



10. A circular outdoor ice rink has a diameter of 25.5 m. What is the area of the ice?
11. At an archery competition for entrants under the age of 16, the diameter of the circular target is 110 cm. What is the area of the target, to the nearest square centimetre?

Apply

12. A circular window has a diameter of 3 m. One square metre of glass costs \$150. What is the cost of the glass for the window?
13. Charity has two circular tiles to paint. The radius of each tile is 22 cm. What is the total area to be painted?