

Answers

Part 1

1. 50 cm^2
2. Answers may vary; the results should agree.
3. a) 112.5 cm^2 b) 216 cm^2 c) 5985 cm^2
4. 1 cm and 36 cm, 2 cm and 18 cm, 3 cm and 12 cm, 4 cm and 9 cm, 6 cm and 6 cm; areas determined by the application should all be 36 cm^2 .
- 5.

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output "I will calculate the area of your rectangle."
output "Enter the length of the rectangle in
        metres:"
length = user input
output "Enter the width of the rectangle in metres:"
width = user input
area = length * width
output "The area is ", area, " square metres."

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Part 2

1. a) When $d = 20 \text{ cm}$, $r = 10 \text{ cm}$,

$$\text{so } \pi r^2 \approx (3.14)(10)^2$$

$$\approx (3.14)(100)$$

$$\approx 314$$

The area is about 314 cm^2 .

 b) 314 cm^2
2. a) 113 cm^2 b) 3215 cm^2 c) $11\,304 \text{ cm}^2$
3. Answers will vary.

Sample: Because you just have to enter different dimensions for a rectangle or a different diameter for a circle and the program does all the calculations, it makes it easy to calculate the areas of lots of different rectangles or circles.