



Englische Übungen zu Berechnungen am Kreis

1. The circle in the middle of a soccer field has the radius $r = 9,5$ m. Find its perimeter.
2. Find **1)** the perimeter and **2)** the area of a circle with the given radius.
 - a. $r = 2,5$ cm
 - b. $r = 14,6$ m
 - c. $r = 2,45$ km
 - d. $r = 0,12$ m
 - e. $r = 6,04$ m
3. Find **1)** the perimeter and **2)** the area of the given sector.
 - a. $r = 7,6$ cm; $\alpha = 82^\circ$
 - b. $r = 6,9$ cm; $b = 12,2$ cm
 - c. $b = 17,4$ cm; $\alpha = 104^\circ$
4. Calculate **1)** the perimeter and **2)** the area of the annulus formed by two concentric circles with $r_1 = 6,4$ cm and $r_2 = 4,8$ cm.

Vocabulary

Englisch	Deutsch
soccer field	Fußballfeld
perimeter	Umfang
area	Fläche
sector	Kreis Sektor
annulus	Kreisring
concentric	konzentrisch





Solutions

1. $U \approx 59,69 \text{ m}$ ($59,6902 \dots$)

2.

a. $U \approx 15,71 \text{ cm}$ ($15,7079 \dots$), $A \approx 19,63 \text{ cm}^2$ ($19,6349 \dots$)

b. $U \approx 91,73 \text{ m}$ ($91,7345 \dots$), $A \approx 669,66 \text{ m}^2$ ($669,6618 \dots$)

c. $U \approx 15,71 \text{ km}$ ($15,7079 \dots$), $A \approx 19,63 \text{ km}^2$ ($19,6349 \dots$)

d. $U \approx 0,75 \text{ m}$ ($0,7539 \dots$), $A \approx 0,05 \text{ m}^2$ ($0,0452 \dots$)

e. $U \approx 37,70 \text{ m}$ ($37,6991 \dots$), $A \approx 114,61 \text{ m}^2$ ($114,6103 \dots$)

3.

a. $U \approx 26,08 \text{ cm}$ ($26,0768 \dots$), $A \approx 41,33 \text{ cm}^2$ ($41,3321 \dots$)

b. $U = 26 \text{ cm}$, $A = 42,09 \text{ cm}^2$

c. $U \approx 36,57 \text{ cm}$ ($36,5720 \dots$), $A \approx 83,40 \text{ cm}^2$ ($83,3983 \dots$)

4. $U \approx 17,48 \text{ cm}$ ($17,4832 \dots$), $A \approx 56,30 \text{ cm}^2$ ($56,2973 \dots$)

