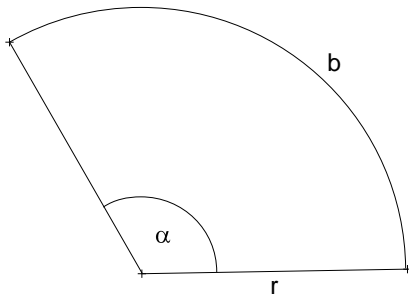


Kreisbogen und Kreisausschnitt



$$b = \frac{\alpha}{360} \cdot d \cdot \pi \quad A = \frac{\alpha}{360} \cdot \pi \cdot r^2$$

Berechne die gesuchte Größe:

1. $d = x$; $\alpha = 150^\circ$; $b = 2,355 \text{ m}$; $A = x$;
2. $d = x$; $\alpha = 210^\circ$; $b = 439,6 \text{ mm}$; $A = x$;
3. $d = 12 \text{ cm}$; $\alpha = x$; $b = 10,99 \text{ cm}$; $A = x$;
4. $d = 150 \text{ m}$; $\alpha = x$; $b = 176,625 \text{ m}$; $A = x$;
5. $d = x$; $\alpha = 75^\circ$; $b = x$; $A = 847,8 \text{ cm}^2$
6. $d = x$; $\alpha = 110^\circ$; $b = x$; $A = 27,9774 \text{ m}^2$
7. $d = 36 \text{ cm}$; $\alpha = x$; $b = x$; $A = 635,85 \text{ cm}^2$
8. $d = 14,4 \text{ mm}$; $\alpha = x$; $b = x$; $A = 122,0832 \text{ mm}^2$
9. $d = x$; $\alpha = 45^\circ$; $b = 0,942 \text{ m}$; $A = x$
10. $d = 99 \text{ m}$; $\alpha = x$; $b = 86,35 \text{ m}$; $A = x$
11. $d = x$; $\alpha = 72^\circ$; $b = x$; $A = 173\,092,5 \text{ mm}^2$
12. $d = 75 \text{ mm}$; $\alpha = x$; $b = x$; $A = 2759,765625 \text{ mm}^2$

Lösungen:

Die Lösungen wurden jeweils mit $\pi = 3,14$ ermittelt.

1. $d = 1,8 \text{ (m)}$ $A = 1,05975 \text{ (m}^2\text{)}$

2. $d = 240 \text{ (mm)}$ $A = 26376 \text{ (mm}^2\text{)}$

3. $\alpha = 105^\circ$ $A = 32,97 \text{ (cm}^2\text{)}$

4. $\alpha = 135^\circ$ $A = 6623,4375 \text{ (m}^2\text{)}$

5. $d = 72 \text{ (cm)}$ $b = 47,1 \text{ (cm)}$

6. $d = 10,8 \text{ (m)}$ $b = 10,362 \text{ (m)}$

7. $\alpha = 225^\circ$ $b = 70,65 \text{ (cm)}$

8. $\alpha = 270^\circ$ $b = 33,912 \text{ (mm)}$

9. $d = 2,4 \text{ (m)}$ $A = 0,5652 \text{ (m}^2\text{)}$

10. $\alpha = 100^\circ$ $A = 2137,1625 \text{ (m}^2\text{)}$

11. $d = 1050 \text{ (mm)}$ $b = 659,4 \text{ (mm)}$

12. $\alpha = 225^\circ$ $b = 147,1875 \text{ (mm)}$