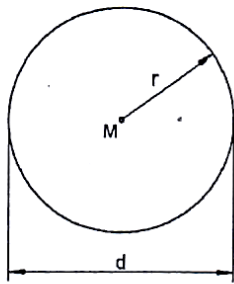


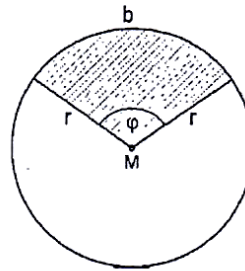
Kreis



Umfang:  $U = 2\pi r$

Fläche:  $A = \pi r^2$

Kreisausschnitt - Kreissektor



Bogenlänge

$b = 2r\pi \frac{\varphi}{360^\circ}$

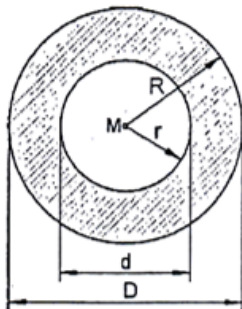
Fläche

$A = r^2\pi \frac{\varphi}{360^\circ}$

Umfang

$U = b + 2r$

Kreisring



Fläche

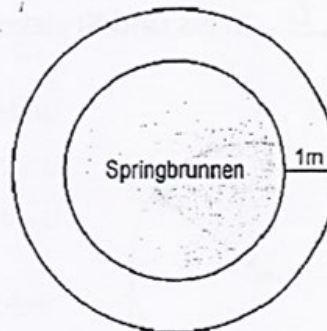
$A = \pi(R^2 - r^2)$

Umfang

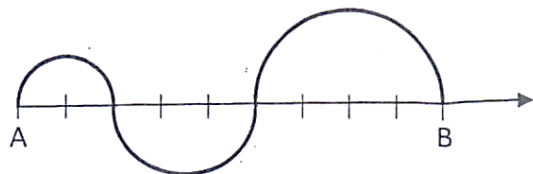
$U = 2\pi(R+r)$

Springbrunnen

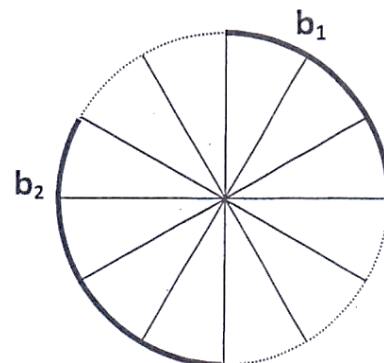
Um einen 2 m tiefen kreisrunden Springbrunnen mit einer Wasserfläche von ca. 20 m<sup>2</sup> soll ein Kiesweg von 1 m Breite angelegt werden. Welche Fläche hat der Kiesweg? Welche Angabe ist zur Lösung nicht notwendig?

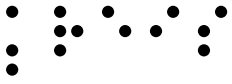


Ein Käfer läuft auf den Kreislinien von A nach B. Welche Strecke hat er zurückgelegt, wenn die Markierungen einen Abstand von 1 m haben?

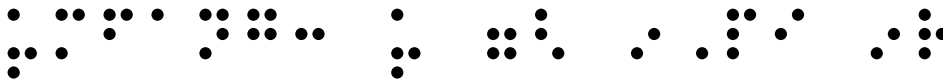
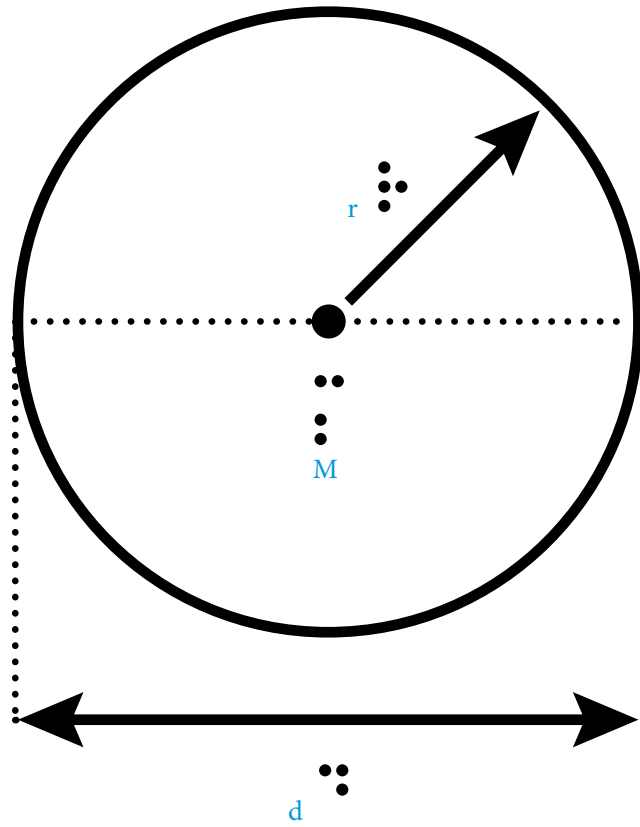


Der Kreis hat einen Radius von  $r = 5$  cm. Bestimme die Länge der beiden Kreisbögen  $b_1$  und  $b_2$ .

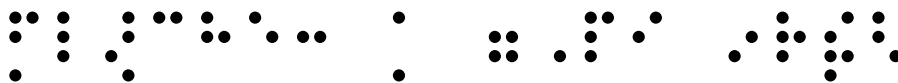




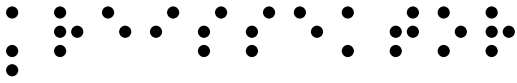
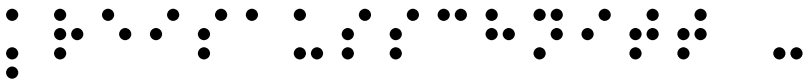
Kreis



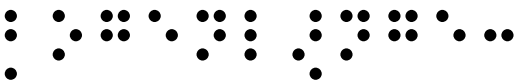
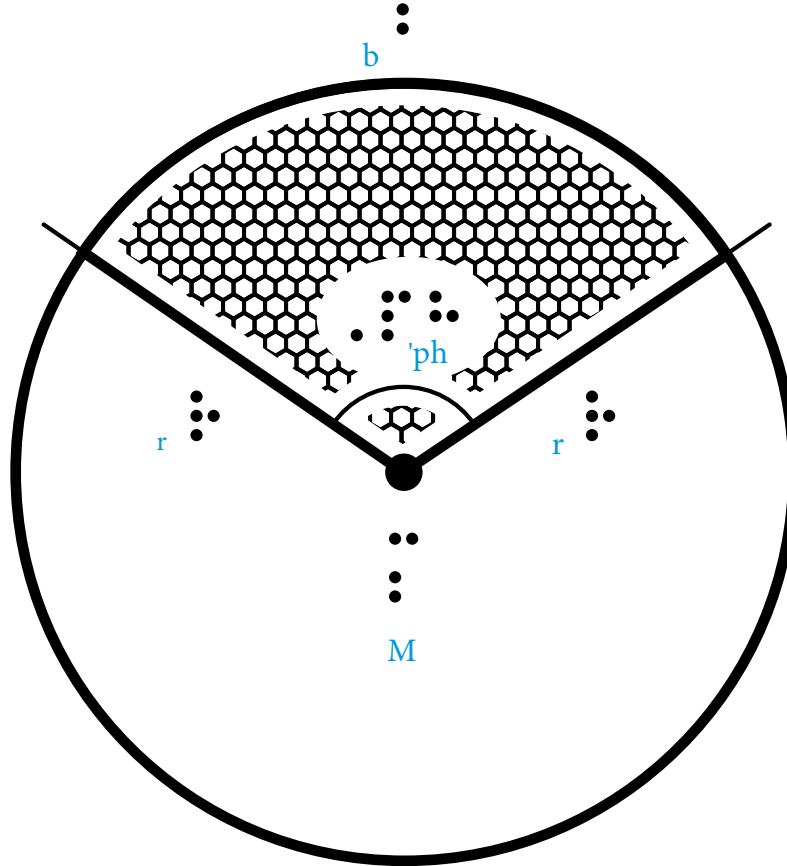
Umfang:  $U = 2 \cdot \pi \cdot r$



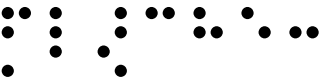
Fläche:  $A = \pi \cdot r^2$



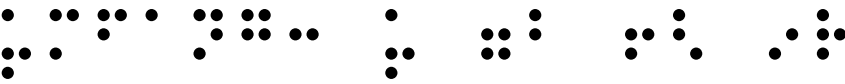
Kreisausschnitt - Kreissektor



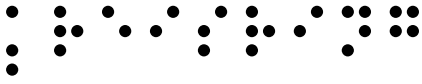
Bogenlänge:  $b = 2 \cdot r \cdot \pi \cdot ph / 360^\circ$



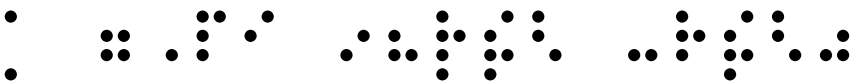
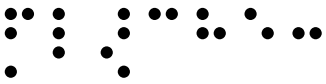
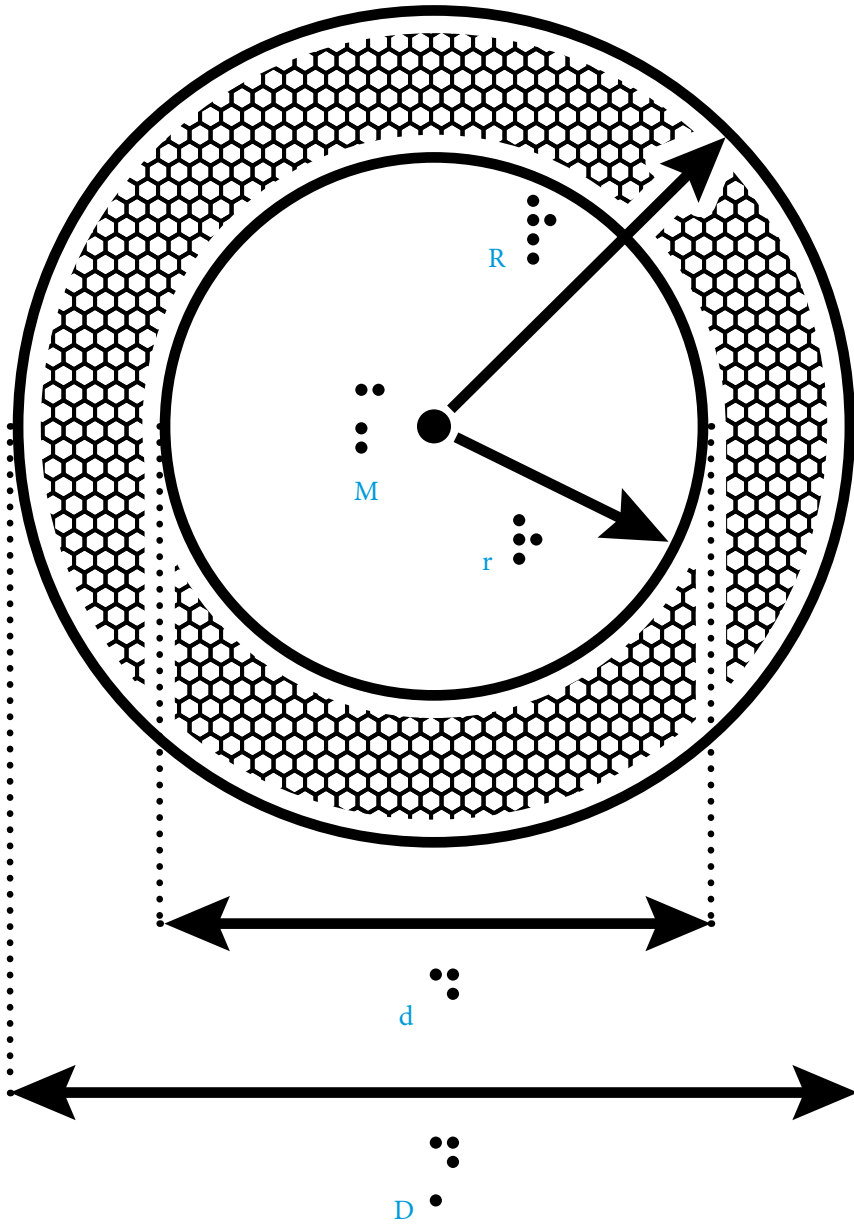
Fläche:  $A = r^2 \cdot \pi \cdot ph / 360^\circ$



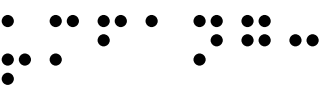
Umfang:  $U = b + 2 \cdot r$



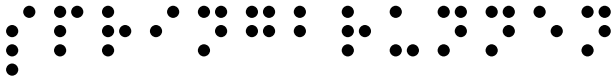
Kreisring



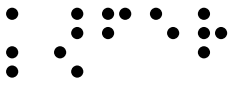
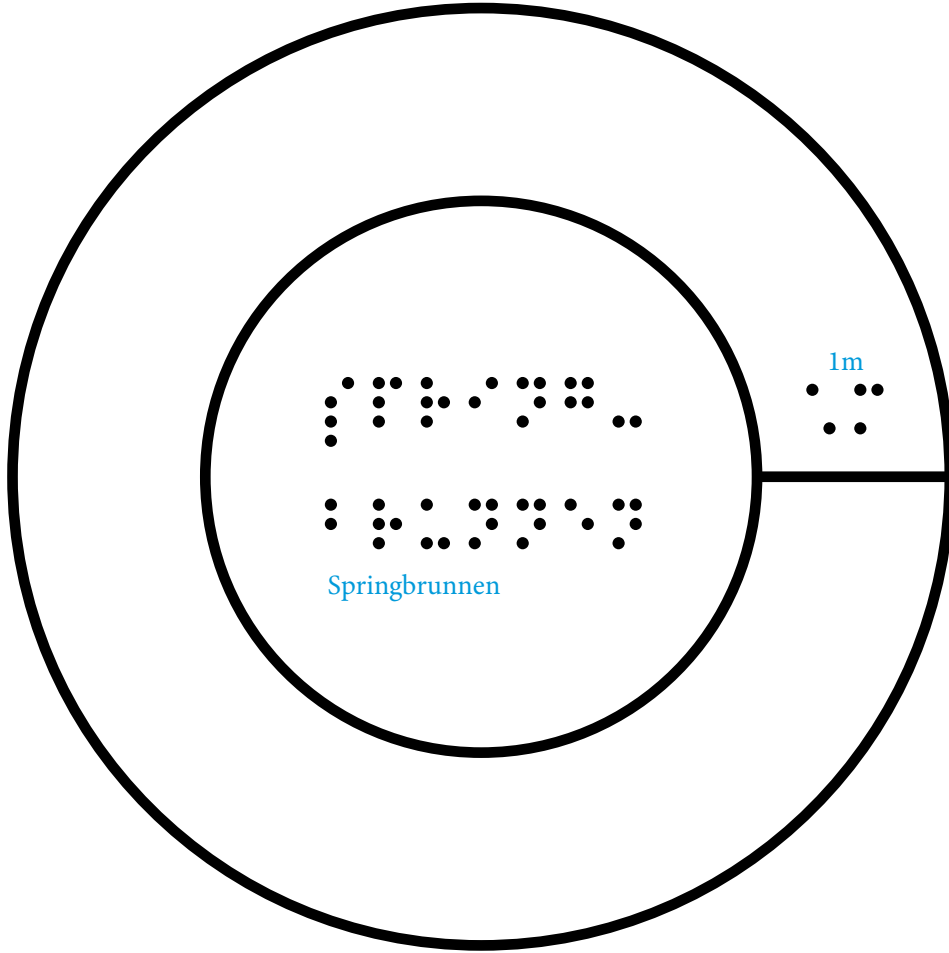
Fläche:  $A = \pi \cdot (R^2 - r^2)$



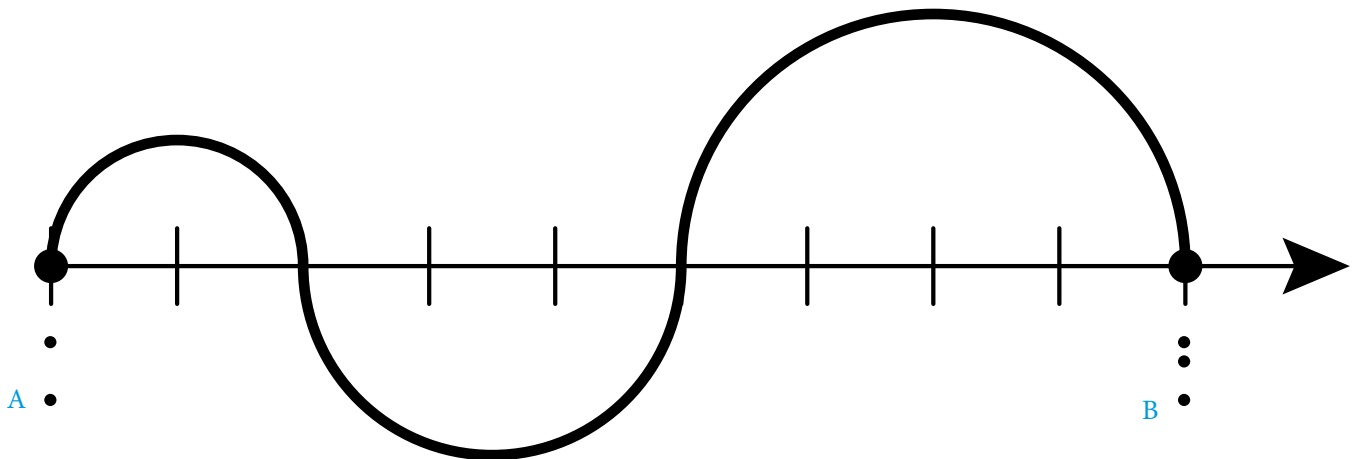
Umfang:  $U = 2 \cdot \pi \cdot (R + r)$

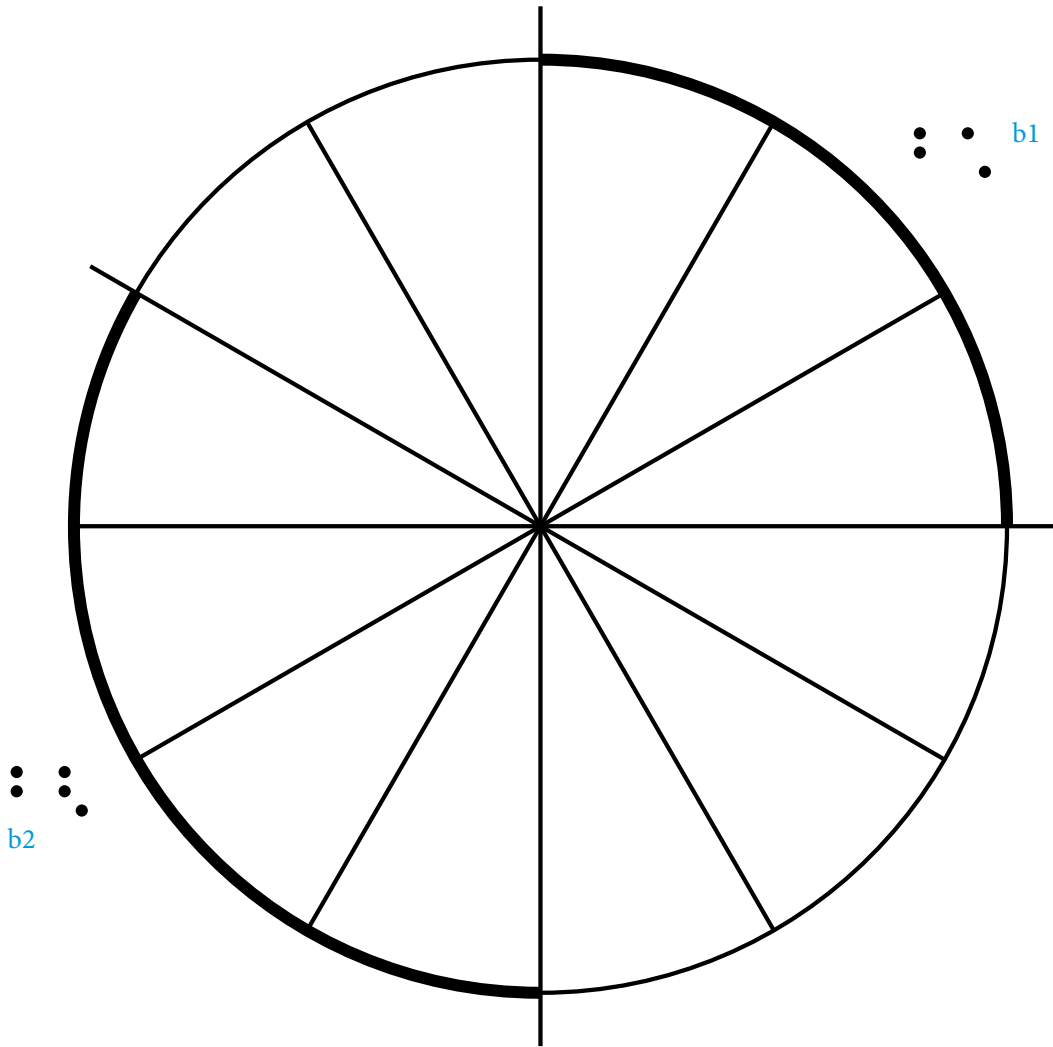
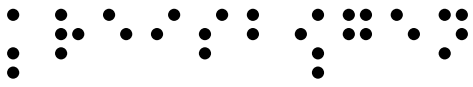


Springbrunnen

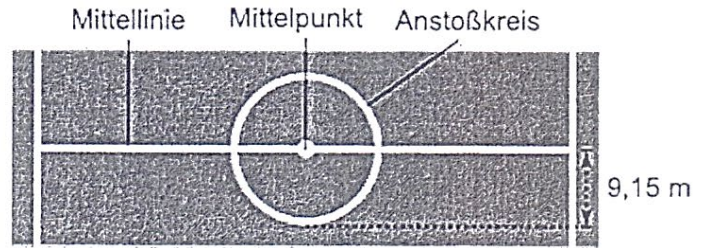


Käfer

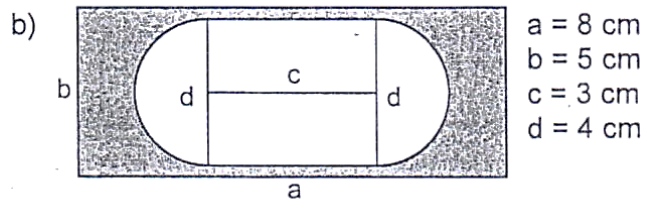
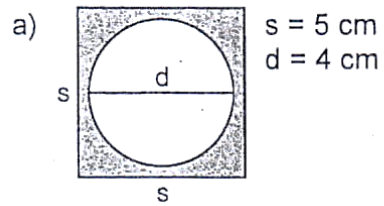




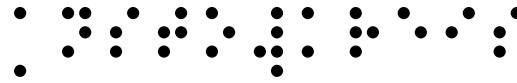
Das Bild zeigt den Ausschnitt eines Fußballfeldes. Welche Wegstrecke legt ein Spieler zurück, wenn er zehnmal diesen Kreis umrundet



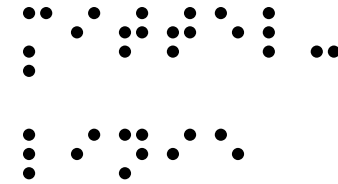
Bestimme den Flächeninhalt folgender Figuren!



Anstößkreis

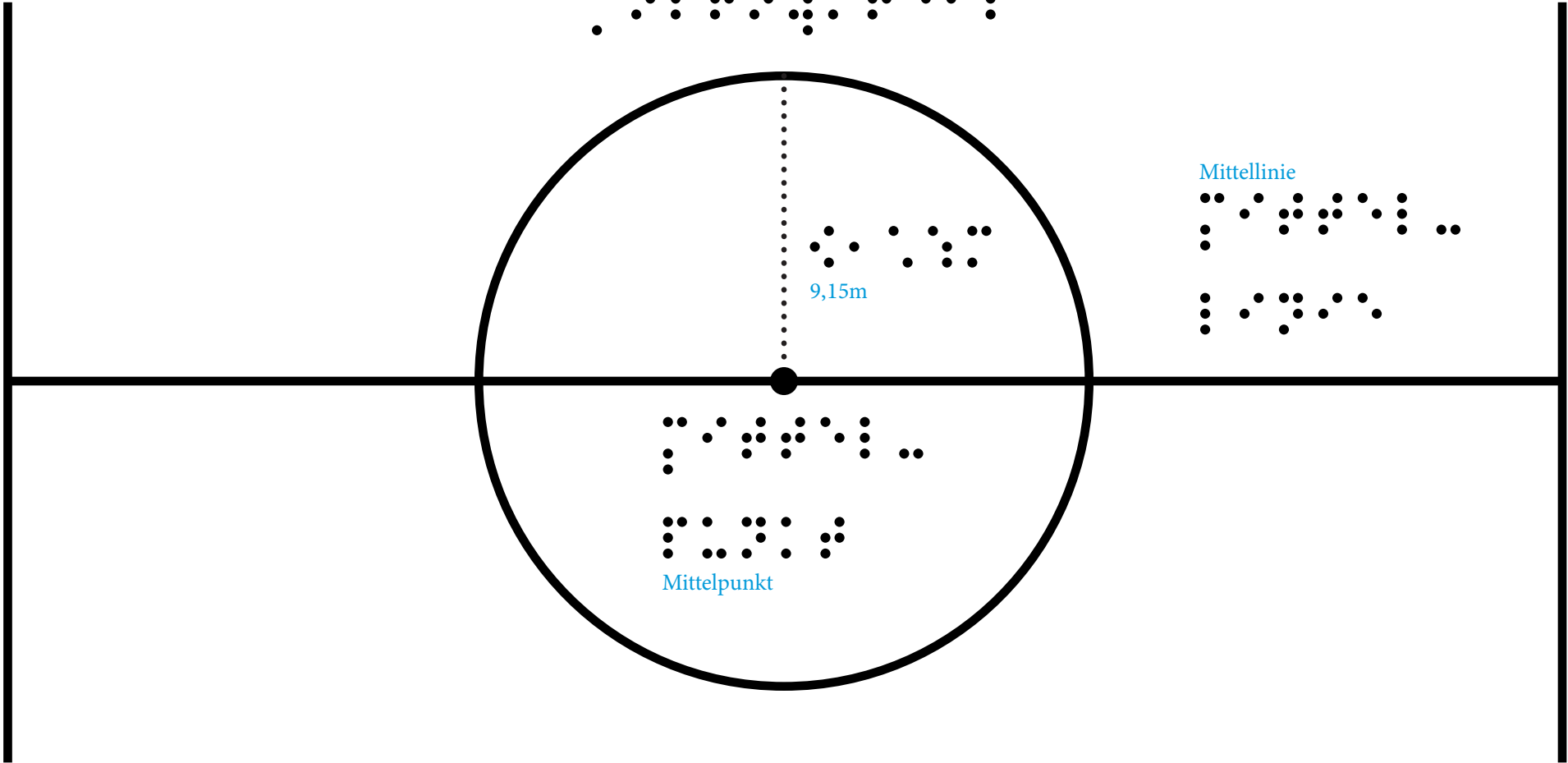


Mittellinie

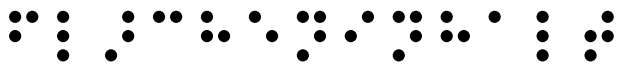


9,15m

Mittelpunkt



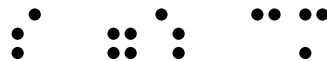
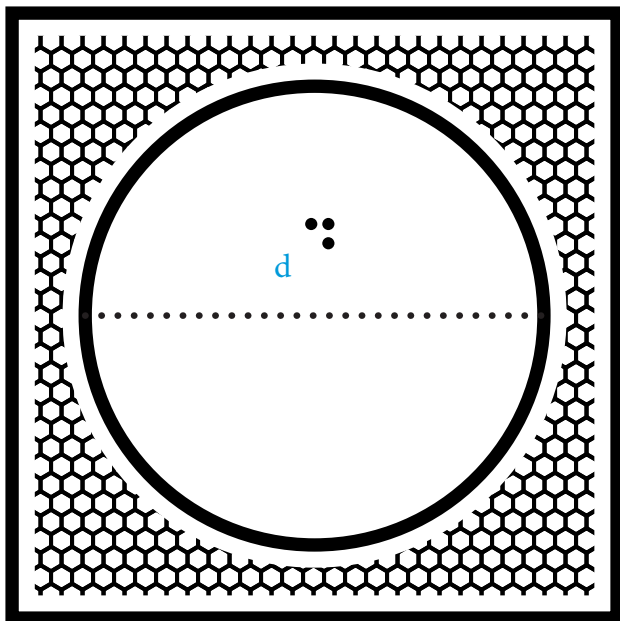




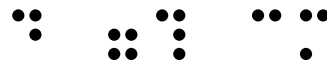
Flächeninhalt

a)

s



s = 5 cm

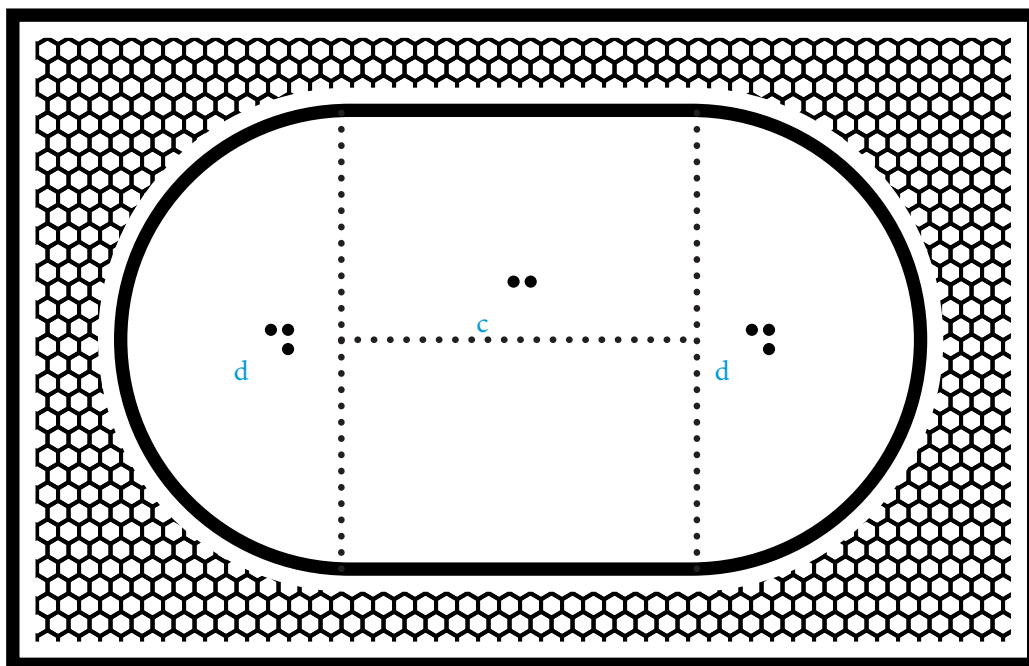


d = 4 cm

s

b)

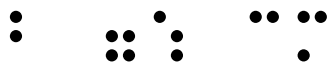
b



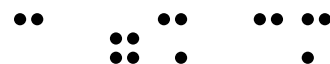
a



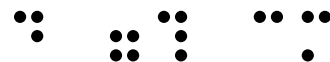
a = 8 cm



b = 5 cm



c = 3 cm



d = 4 cm