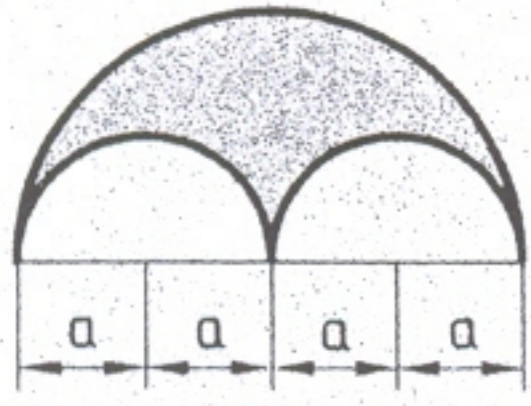


# Kreisteile berechnen

**1. Berechne den Flächeninhalt der eingefärbten Figuren. Achte auf die Angaben!**

314,16 mm<sup>2</sup>

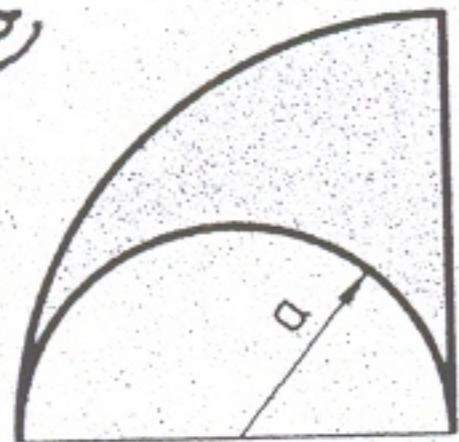
a)



$a = 10 \text{ mm}$

628,32 mm<sup>2</sup>

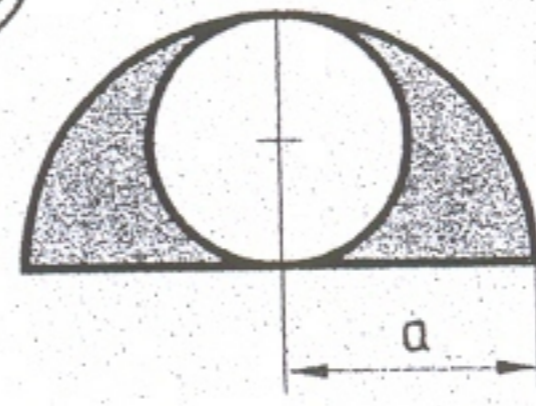
b)



$a = 20 \text{ mm}$

314,16 mm<sup>2</sup>

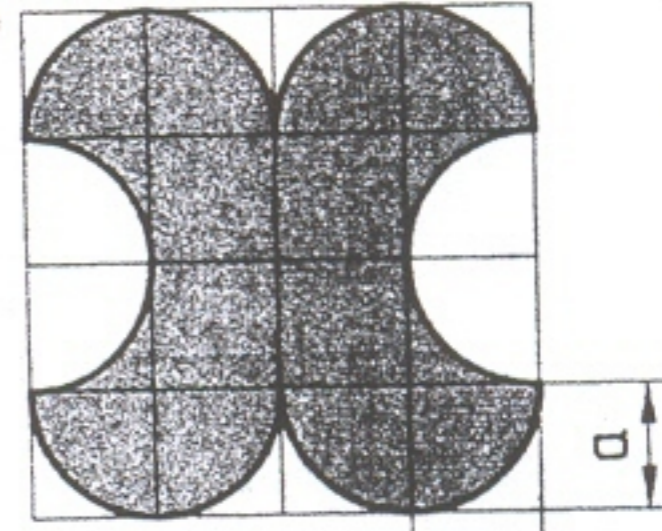
c)



$a = 20 \text{ mm}$

1114,16 mm<sup>2</sup>

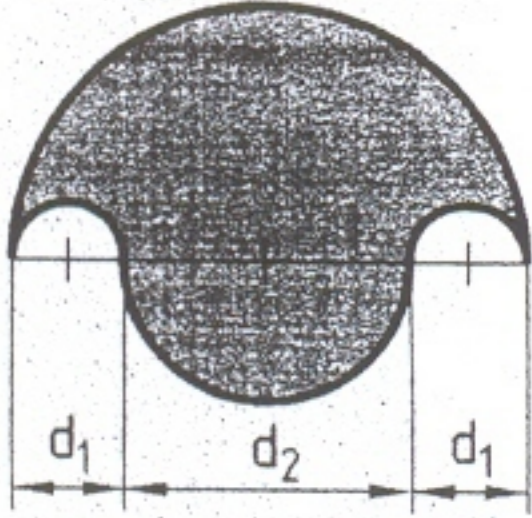
d)



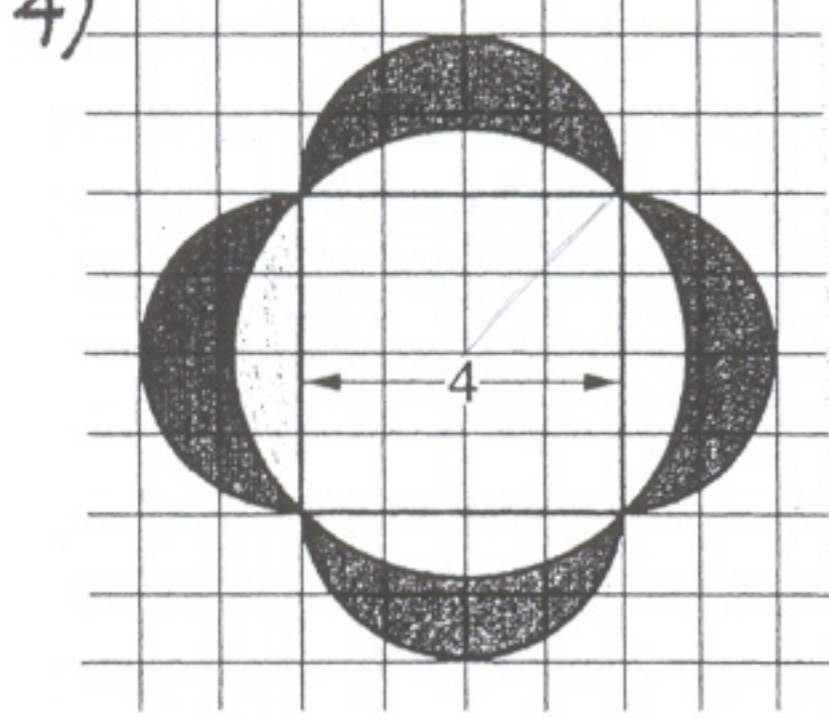
$a = 10 \text{ mm}$

3848,45 mm<sup>2</sup>

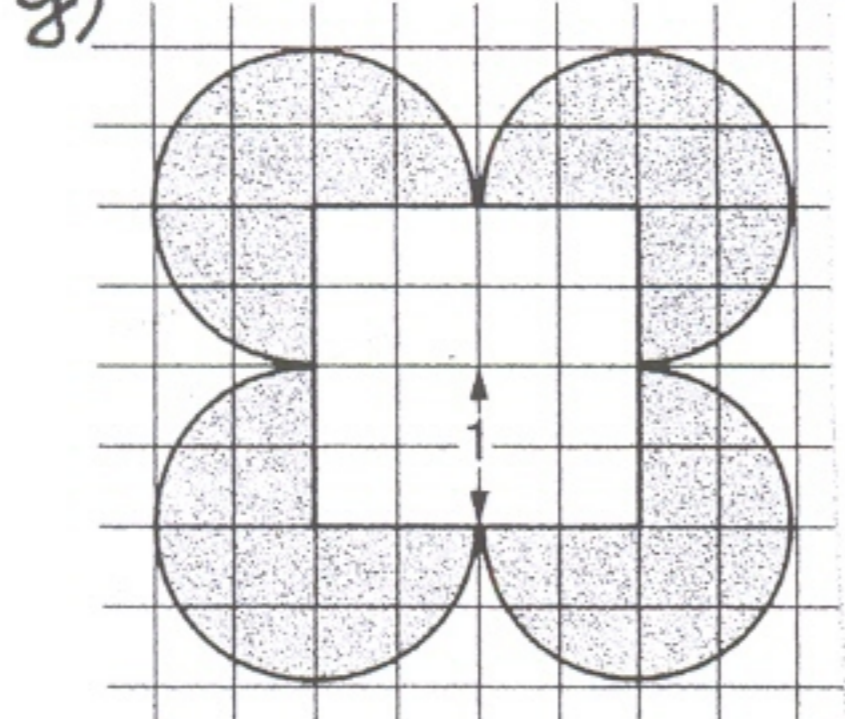
e)  $d_1 = 20 \text{ mm}$   
 $d_2 = 50 \text{ mm}$



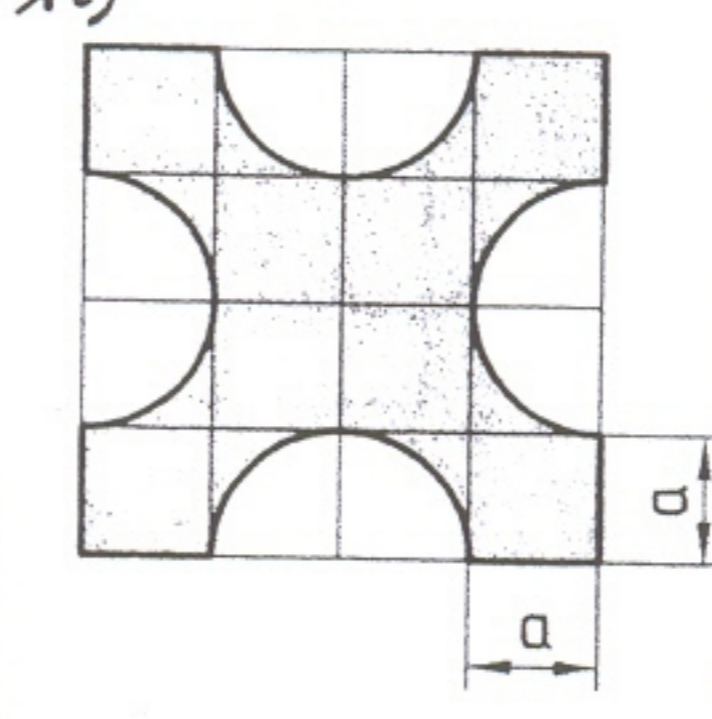
4) 16 cm<sup>2</sup>



8) 9,42 cm<sup>2</sup>

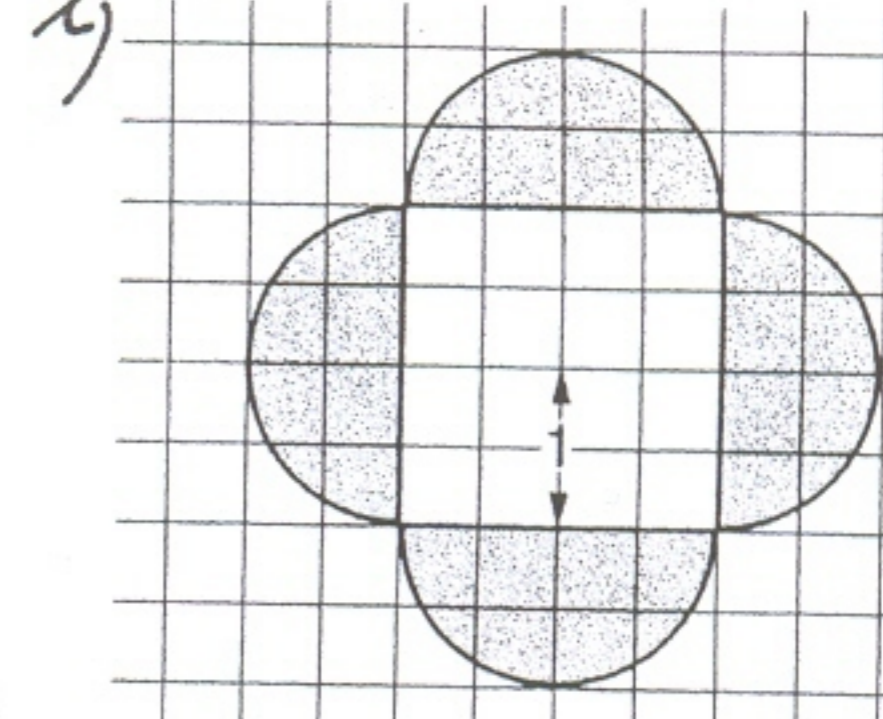


6) 971,68 mm<sup>2</sup>

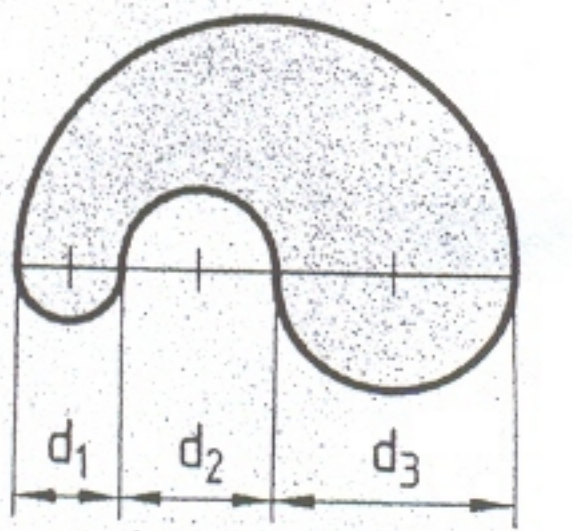


$a = 10 \text{ mm}$

7) 6,28 cm<sup>2</sup>

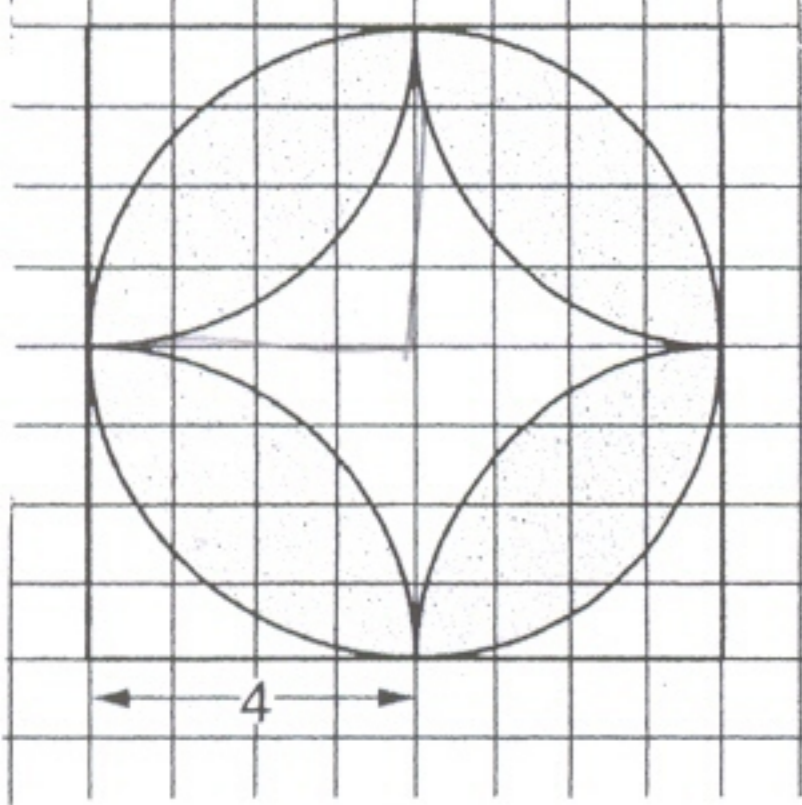


5) 3604,98 mm<sup>2</sup>  
 $d_1 = 20 \text{ mm}$   
 $d_2 = 30 \text{ mm}$   
 $d_3 = 44 \text{ mm}$

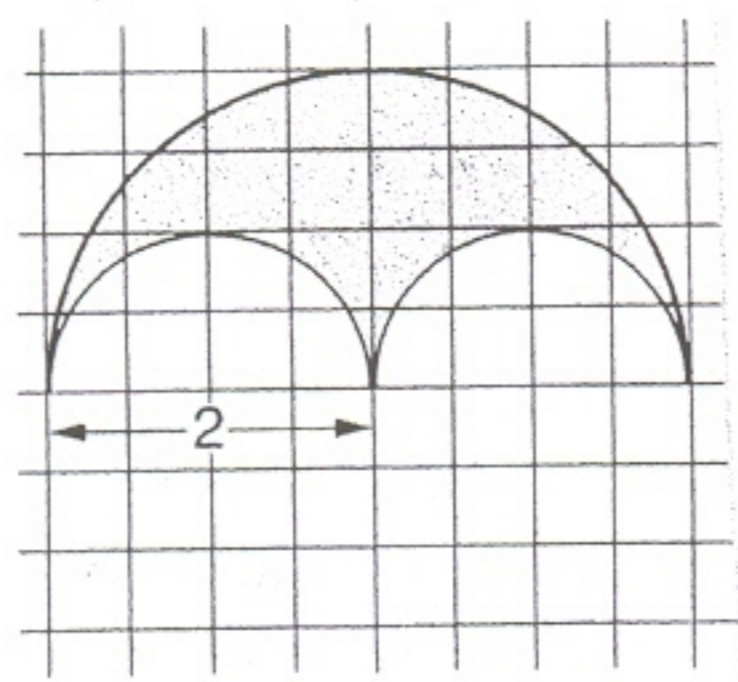


**2. Berechne sowohl den Flächeninhalt als auch den Umfang der Figur.**

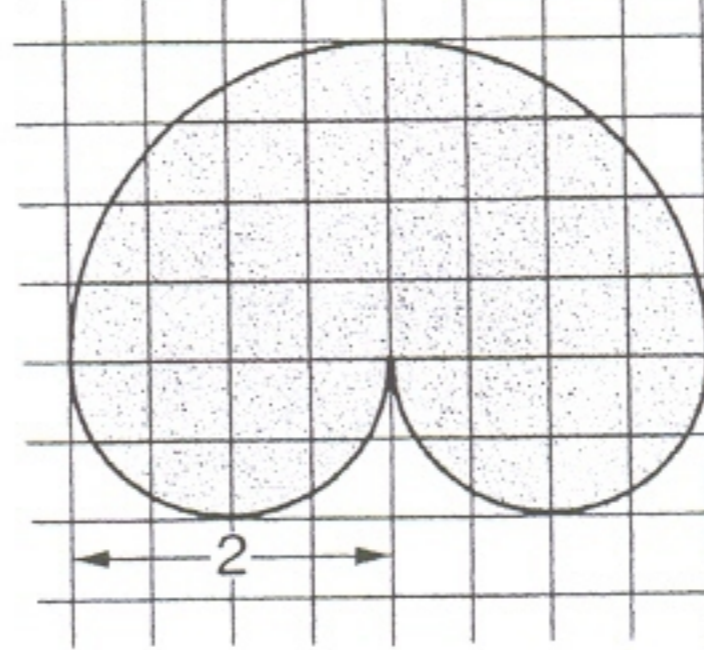
a)  $u = 50,27 \text{ cm}$   $A = 36,53 \text{ cm}^2$



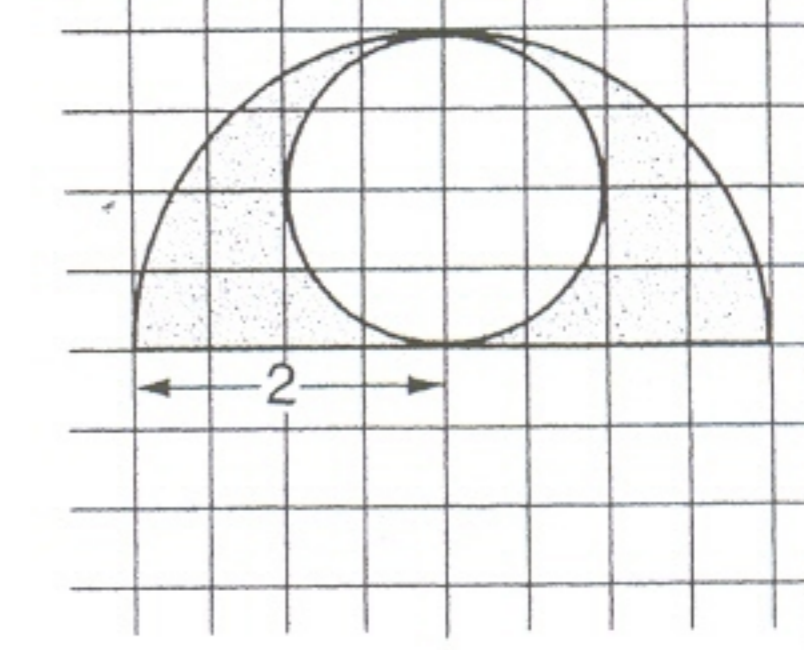
b)  $u = 12,57 \text{ cm}$   $A = 3,14 \text{ cm}^2$



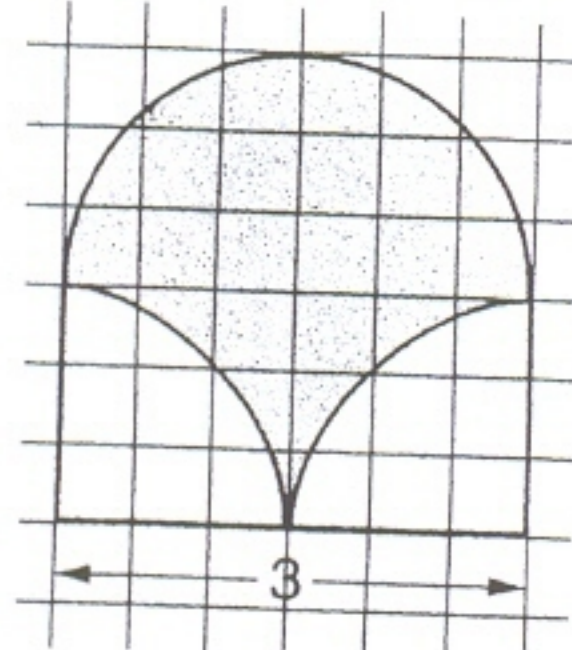
c)  $u = 12,57 \text{ cm}$   $A = 9,42 \text{ cm}^2$



d)  $u = 16,57 \text{ cm}$   $A = 3,14 \text{ cm}^2$

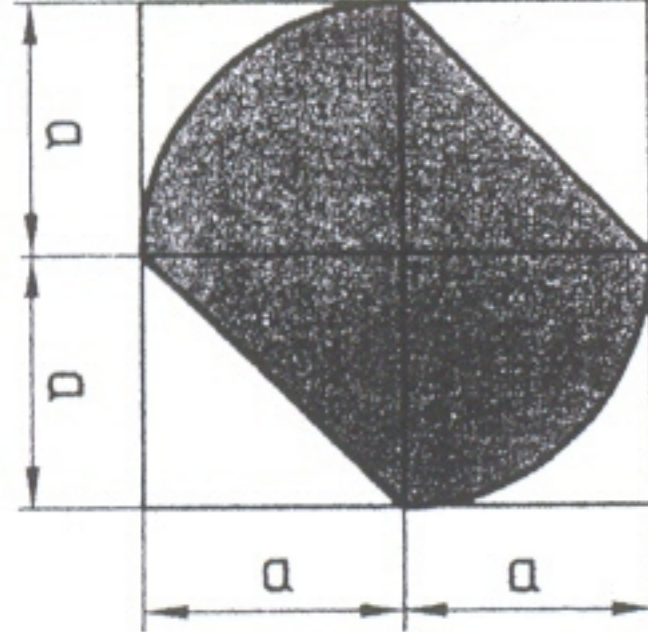


e)  $u = 9,42 \text{ cm}$   $A = 4,5 \text{ cm}^2$



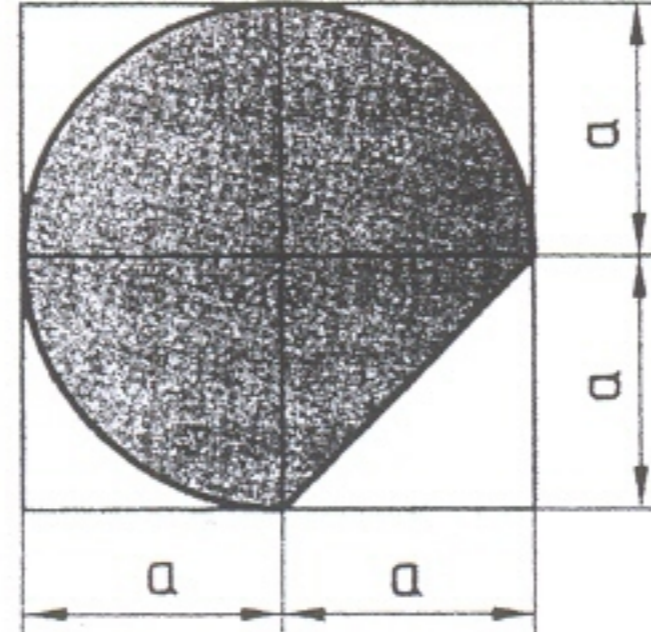
**3. Wie viel Prozent der Quadratfläche entfallen jeweils auf das gefärbte Flächenstück?**

a) 64%

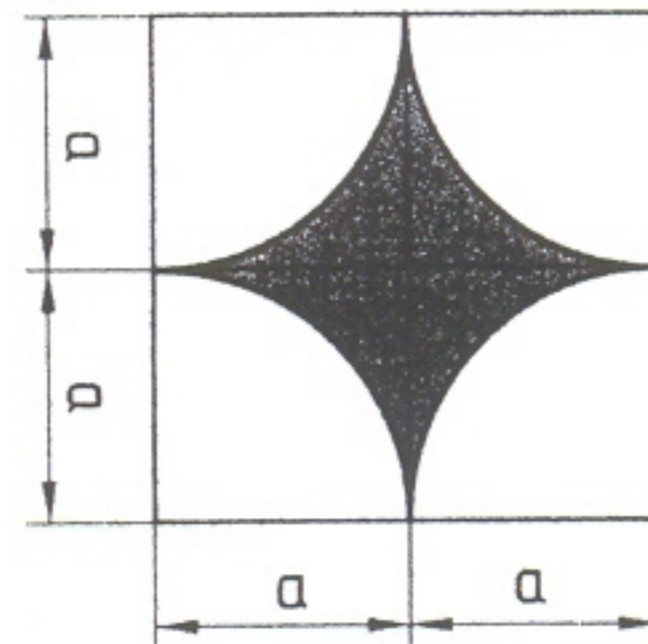


$a = r = 25 \text{ mm}$

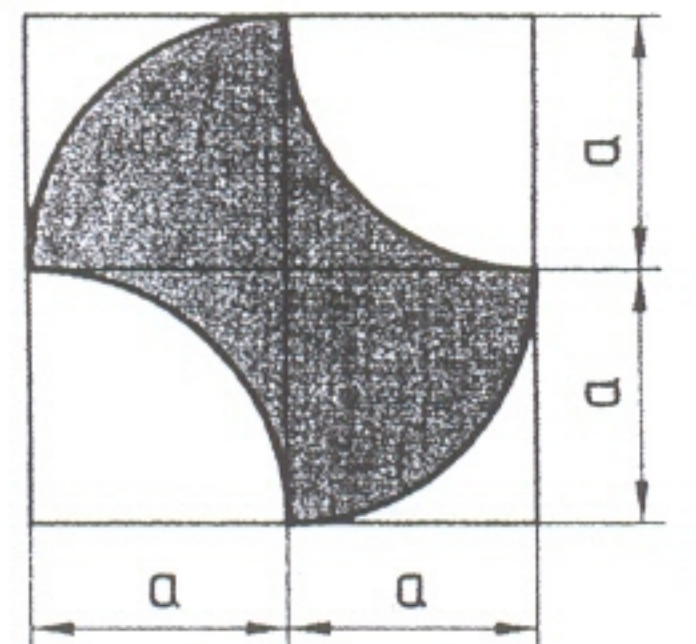
b) 65%



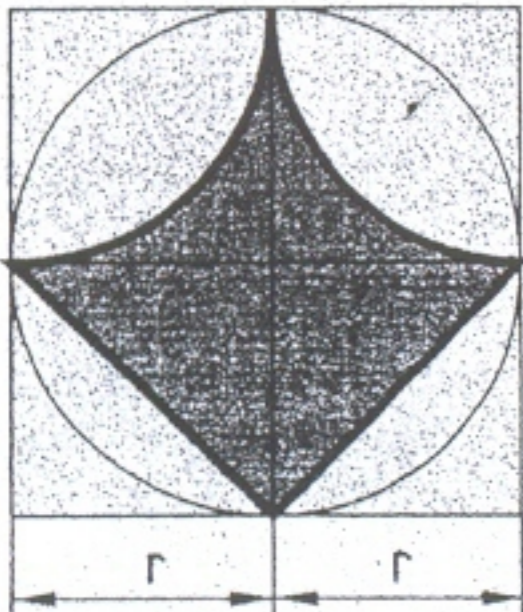
c) 21,46%



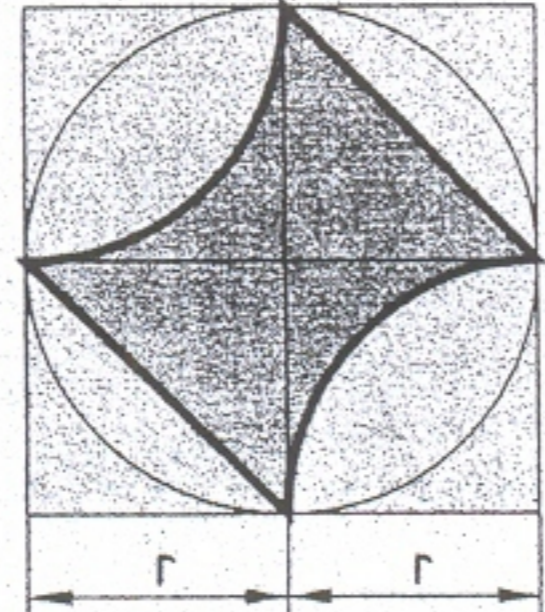
d) 50%



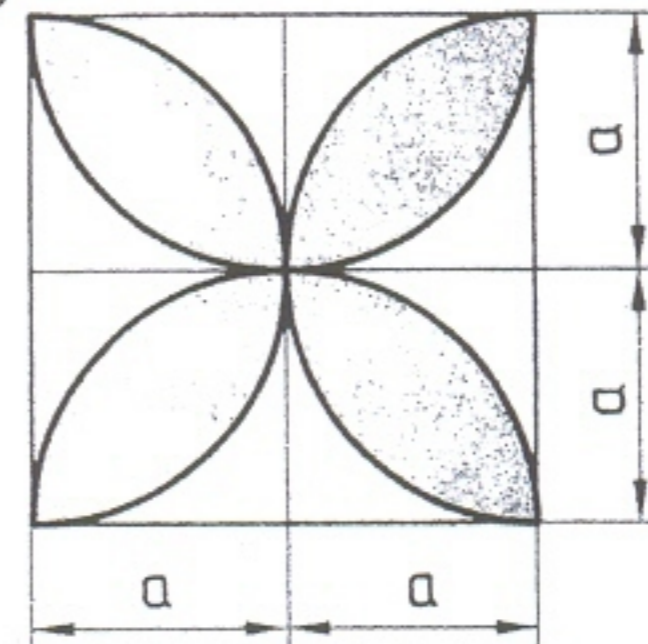
e) 35,7%



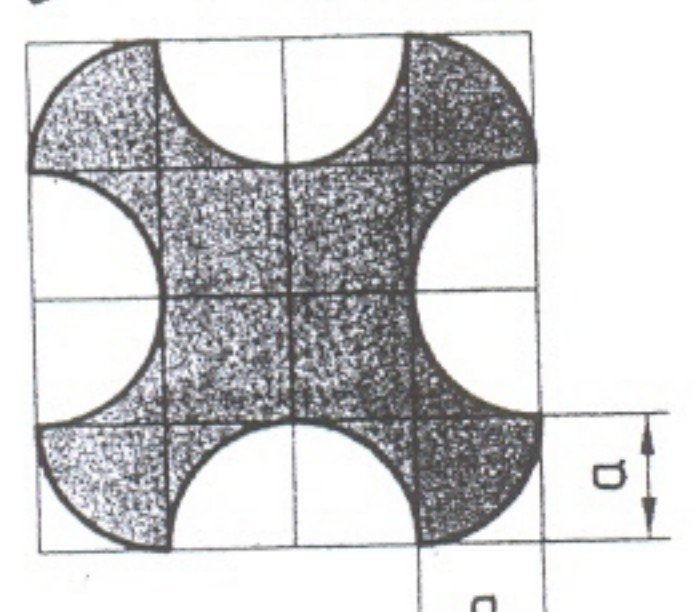
f) 35,7%



g) 57,08%



h) 55,4%



$a = 10 \text{ mm}$