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Mathematik-Aufgabenpool
> Berechnungen in Rechtecken

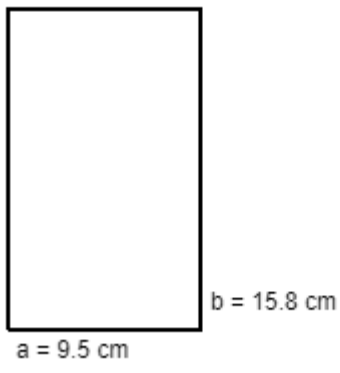
Einleitung: In einem Rechteck ABCD mit den Seiten a, b lassen sich Umfang und Flächeninhalt des Rechtecks berechnen als: u = 2a + 2b, A = ab. Umstellen der Umfangs- bzw. Flächenformel führt auf die Berechnung der Rechteckseiten.

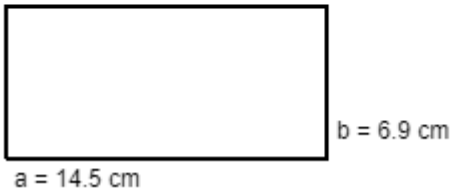
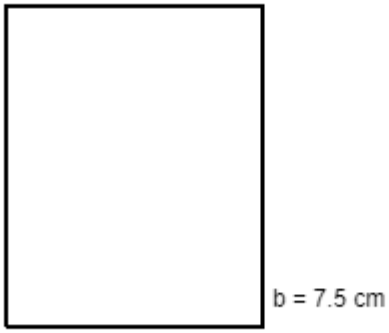
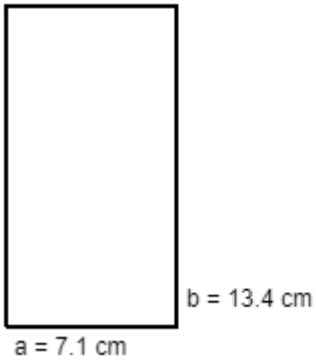
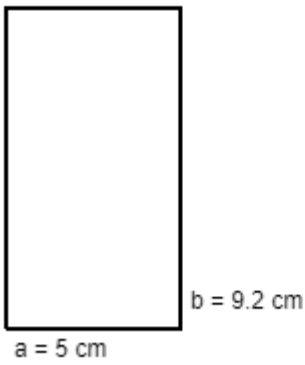
Rechteck: Seiten a, b

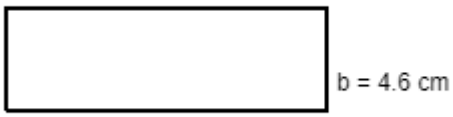
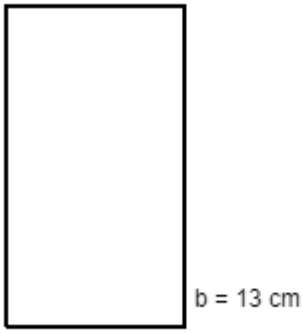
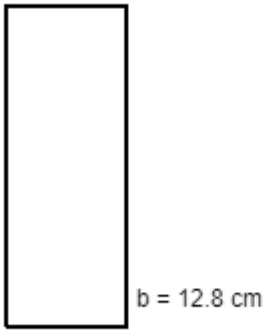
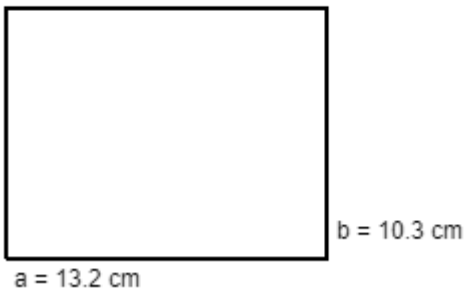
Formelsammlung:

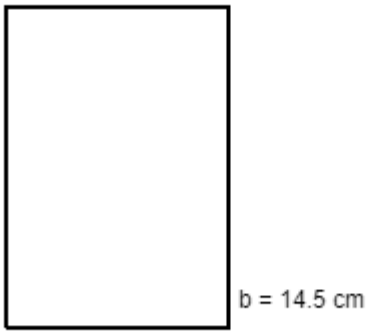
Umfang	u = 2a + 2b = 2(a+b)	
Seiten	$a = \frac{u-2b}{2}$	$b = \frac{u-2a}{2}$
Flächeninhalt	A = ab	
Seiten	$a = \frac{A}{b}$	$b = \frac{A}{a}$

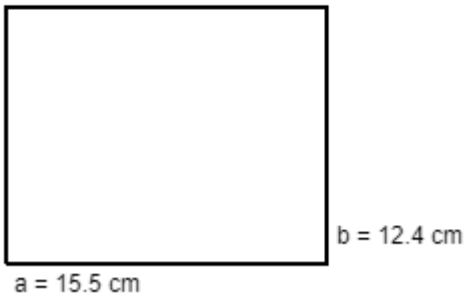
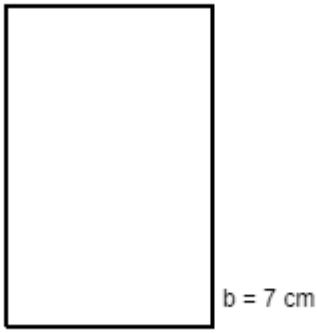
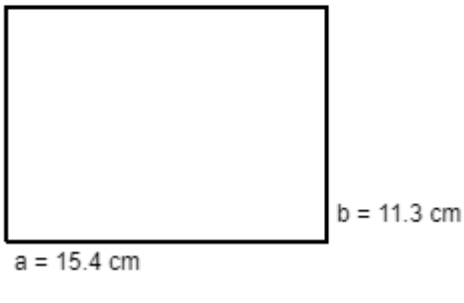
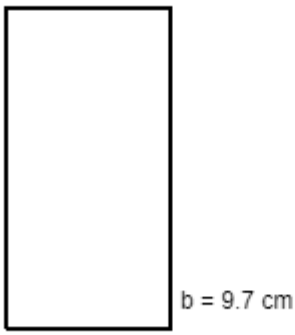
Aufgabe 1: Berechne Umfang und Flächeninhalt des Rechtecks (Seiten a, b, u = Umfang, A = Flächeninhalt).

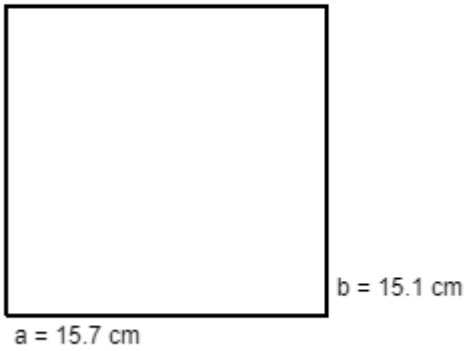
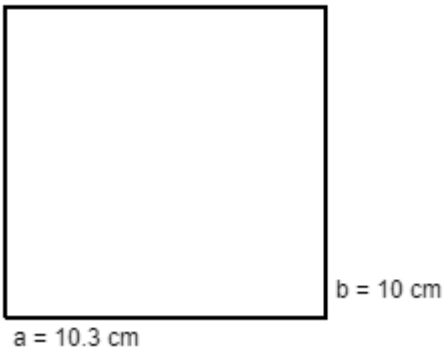
Nr.	*Gegeben* (Grafik)*:*
1	

2	
3	
4	
5	

6	 b = 4.6 cm a = 14.4 cm
7	 b = 13 cm a = 7.2 cm
8	 b = 12.8 cm a = 4.8 cm
9	 b = 10.3 cm a = 13.2 cm

10	 b = 6.2 cm a = 11.6 cm
11	 b = 9.3 cm a = 13.8 cm
12	 b = 14.5 cm a = 10.1 cm
13	 b = 7 cm a = 13.6 cm

14	 b = 12.4 cm a = 15.5 cm
15	 b = 7 cm a = 4.5 cm
16	 b = 11.3 cm a = 15.4 cm
17	 b = 9.7 cm a = 5 cm

18	
19	
20	

Vorgehensweise: Zur Ermittlung der fehlenden Größen beim Rechteck ist die obige Formelsammlung anzuwenden.

Lösungen:

Nr.	*Gegeben:*	*Lösungen:*
1	a = 9.5 cm, b = 15.8 cm	u = 50.6 cm, A = 150.1 cm^2
2	a = 14.5 cm, b = 6.9 cm	u = 42.8 cm, A = 100.05 cm^2
3	a = 6 cm, b = 7.5 cm	u = 27 cm, A = 45 cm^2
4	a = 7.1 cm, b = 13.4 cm	u = 41 cm, A = 95.14 cm^2
5	a = 5 cm, b = 9.2 cm	u = 28.4 cm, A = 46 cm^2
6	a = 14.4 cm, b = 4.6 cm	u = 38 cm, A = 66.24 cm^2
7	a = 7.2 cm, b = 13 cm	u = 40.4 cm, A = 93.6 cm^2
8	a = 4.8 cm, b = 12.8 cm	u = 35.2 cm, A = 61.44 cm^2
9	a = 13.2 cm, b = 10.3 cm	u = 47 cm, A = 135.96 cm^2
10	a = 11.6 cm, b = 6.2 cm	u = 35.6 cm, A = 71.92 cm^2

11	a = 13.8 cm, b = 9.3 cm	u = 46.2 cm, A = 128.34 cm^2
12	a = 10.1 cm, b = 14.5 cm	u = 49.2 cm, A = 146.45 cm^2
13	a = 13.6 cm, b = 7 cm	u = 41.2 cm, A = 95.2 cm^2
14	a = 15.5 cm, b = 12.4 cm	u = 55.8 cm, A = 192.2 cm^2
15	a = 4.5 cm, b = 7 cm	u = 23 cm, A = 31.5 cm^2
16	a = 15.4 cm, b = 11.3 cm	u = 53.4 cm, A = 174.02 cm^2
17	a = 5 cm, b = 9.7 cm	u = 29.4 cm, A = 48.5 cm^2
18	a = 15.7 cm, b = 15.1 cm	u = 61.6 cm, A = 237.07 cm^2
19	a = 10.3 cm, b = 10 cm	u = 40.6 cm, A = 103 cm^2
20	a = 4.1 cm, b = 15.9 cm	u = 40 cm, A = 65.19 cm^2

Aufgabe 2: Berechne Umfang und Flächeninhalt des Rechtecks (Seiten a, b, u = Umfang, A = Flächeninhalt).

Nr.	*Gegeben:*
1	a = 7.4 cm, b = 11.4 cm
2	a = 7.2 cm, b = 16.2 cm
3	a = 8 cm, b = 15.1 cm
4	a = 12.8 cm, b = 8.7 cm
5	a = 6.6 cm, b = 11.2 cm
6	a = 11.7 cm, b = 17.1 cm
7	a = 11.9 cm, b = 15.4 cm
8	a = 14.8 cm, b = 15.4 cm
9	a = 13.9 cm, b = 10 cm
10	a = 19.4 cm, b = 5.9 cm
11	a = 11.8 cm, b = 19.5 cm
12	a = 9.1 cm, b = 10.1 cm
13	a = 15.1 cm, b = 19.2 cm
14	a = 6.1 cm, b = 13.8 cm
15	a = 14.6 cm, b = 11.1 cm
16	a = 16.9 cm, b = 8.7 cm
17	a = 19.8 cm, b = 16.5 cm
18	a = 19.2 cm, b = 15.3 cm
19	a = 19 cm, b = 5.2 cm
20	a = 9.6 cm, b = 7.2 cm

Vorgehensweise: Zur Ermittlung der fehlenden Größen beim Rechteck ist die obige Formelsammlung anzuwenden.

Lösungen:

Nr.	*Gegeben:*	*Lösungen:*
1	a = 7.4 cm, b = 11.4 cm	u = 37.6 cm, A = 84.36 cm^2
2	a = 7.2 cm, b = 16.2 cm	u = 46.8 cm, A = 116.64 cm^2
3	a = 8 cm, b = 15.1 cm	u = 46.2 cm, A = 120.8 cm^2

4	a = 12.8 cm, b = 8.7 cm	u = 43 cm, A = 111.36 cm^2
5	a = 6.6 cm, b = 11.2 cm	u = 35.6 cm, A = 73.92 cm^2
6	a = 11.7 cm, b = 17.1 cm	u = 57.6 cm, A = 200.07 cm^2
7	a = 11.9 cm, b = 15.4 cm	u = 54.6 cm, A = 183.26 cm^2
8	a = 14.8 cm, b = 15.4 cm	u = 60.4 cm, A = 227.92 cm^2
9	a = 13.9 cm, b = 10 cm	u = 47.8 cm, A = 139 cm^2
10	a = 19.4 cm, b = 5.9 cm	u = 50.6 cm, A = 114.46 cm^2
11	a = 11.8 cm, b = 19.5 cm	u = 62.6 cm, A = 230.1 cm^2
12	a = 9.1 cm, b = 10.1 cm	u = 38.4 cm, A = 91.91 cm^2
13	a = 15.1 cm, b = 19.2 cm	u = 68.6 cm, A = 289.92 cm^2
14	a = 6.1 cm, b = 13.8 cm	u = 39.8 cm, A = 84.18 cm^2
15	a = 14.6 cm, b = 11.1 cm	u = 51.4 cm, A = 162.06 cm^2
16	a = 16.9 cm, b = 8.7 cm	u = 51.2 cm, A = 147.03 cm^2
17	a = 19.8 cm, b = 16.5 cm	u = 72.6 cm, A = 326.7 cm^2
18	a = 19.2 cm, b = 15.3 cm	u = 69 cm, A = 293.76 cm^2
19	a = 19 cm, b = 5.2 cm	u = 48.4 cm, A = 98.8 cm^2
20	a = 9.6 cm, b = 7.2 cm	u = 33.6 cm, A = 69.12 cm^2

Aufgabe 3: Berechne Umfang und Flächeninhalt des Rechtecks (Seiten a, b, u = Umfang, A = Flächeninhalt).

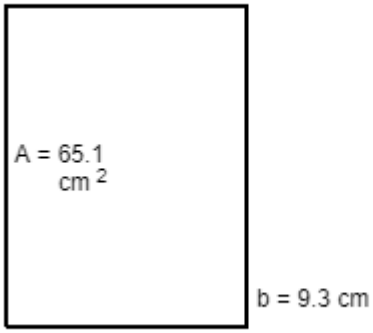
Nr.	*Gegeben:*
1	a = 16.3 mm, b = 9.2 mm
2	a = 18.7 cm, b = 10.9 cm
3	a = 7.5 dm, b = 18.3 dm
4	a = 19.2 m, b = 7.5 m
5	a = 18.5 m, b = 7.1 m
6	a = 11.8 cm, b = 8.8 cm
7	a = 15.4 m, b = 7 m
8	a = 7.2 m, b = 17.1 m
9	a = 20.5 mm, b = 9.7 mm
10	a = 5.4 mm, b = 6.2 mm
11	a = 16.8 mm, b = 19.1 mm
12	a = 21.8 cm, b = 24.8 cm
13	a = 18.6 dm, b = 18.9 dm
14	a = 15.1 cm, b = 10.4 cm
15	a = 8 dm, b = 16.8 dm
16	a = 15.7 mm, b = 6 mm
17	a = 12.3 m, b = 10.4 m
18	a = 17.5 m, b = 11.7 m
19	a = 6.1 m, b = 16.8 m
20	a = 13 mm, b = 13.9 mm

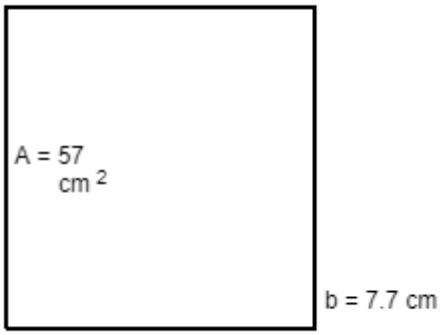
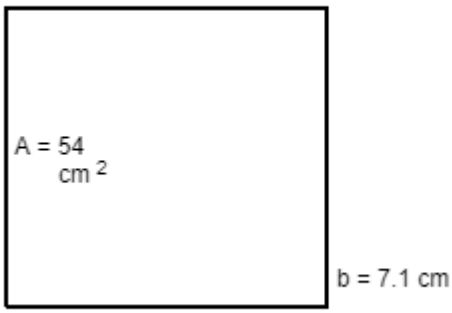
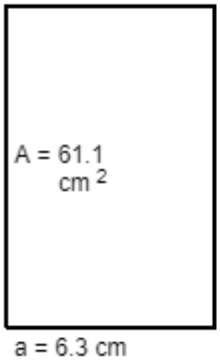
Vorgehensweise: Zur Ermittlung der fehlenden Größen beim Rechteck ist die obige Formelsammlung anzuwenden.

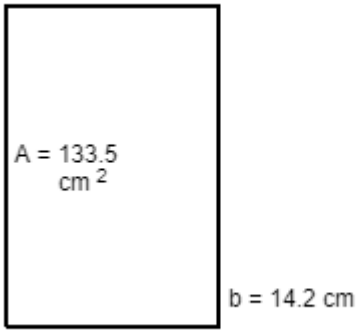
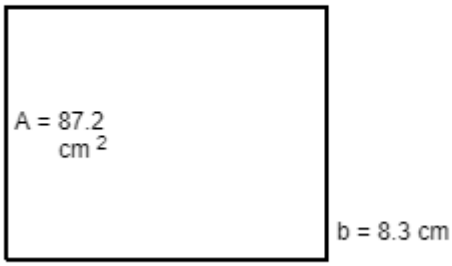
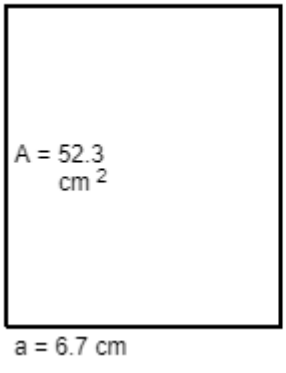
Lösungen:

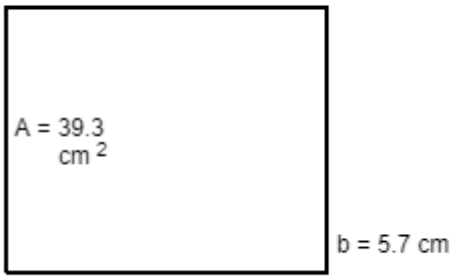
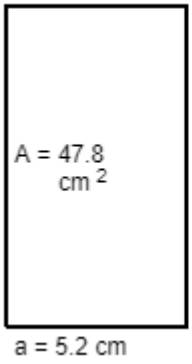
Nr.	*Gegeben:*	*Lösungen:*
1	a = 16.3 mm, b = 9.2 mm	u = 51 mm, A = 149.96 mm^2
2	a = 18.7 cm, b = 10.9 cm	u = 59.2 cm, A = 203.83 cm^2
3	a = 7.5 dm, b = 18.3 dm	u = 51.6 dm, A = 137.25 dm^2
4	a = 19.2 m, b = 7.5 m	u = 53.4 m, A = 144 m^2
5	a = 18.5 m, b = 7.1 m	u = 51.2 m, A = 131.35 m^2
6	a = 11.8 cm, b = 8.8 cm	u = 41.2 cm, A = 103.84 cm^2
7	a = 15.4 m, b = 7 m	u = 44.8 m, A = 107.8 m^2
8	a = 7.2 m, b = 17.1 m	u = 48.6 m, A = 123.12 m^2
9	a = 20.5 mm, b = 9.7 mm	u = 60.4 mm, A = 198.85 mm^2
10	a = 5.4 mm, b = 6.2 mm	u = 23.2 mm, A = 33.48 mm^2
11	a = 16.8 mm, b = 19.1 mm	u = 71.8 mm, A = 320.88 mm^2
12	a = 21.8 cm, b = 24.8 cm	u = 93.2 cm, A = 540.64 cm^2
13	a = 18.6 dm, b = 18.9 dm	u = 75 dm, A = 351.54 dm^2
14	a = 15.1 cm, b = 10.4 cm	u = 51 cm, A = 157.04 cm^2
15	a = 8 dm, b = 16.8 dm	u = 49.6 dm, A = 134.4 dm^2
16	a = 15.7 mm, b = 6 mm	u = 43.4 mm, A = 94.2 mm^2
17	a = 12.3 m, b = 10.4 m	u = 45.4 m, A = 127.92 m^2
18	a = 17.5 m, b = 11.7 m	u = 58.4 m, A = 204.75 m^2
19	a = 6.1 m, b = 16.8 m	u = 45.8 m, A = 102.48 m^2
20	a = 13 mm, b = 13.9 mm	u = 53.8 mm, A = 180.7 mm^2

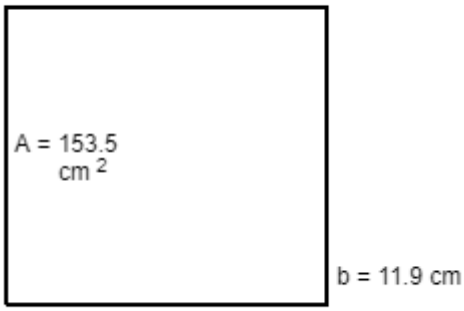
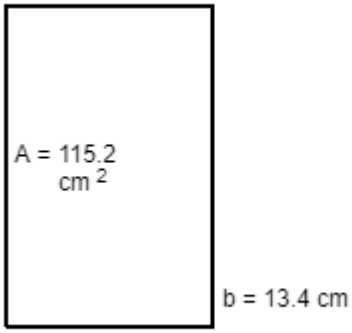
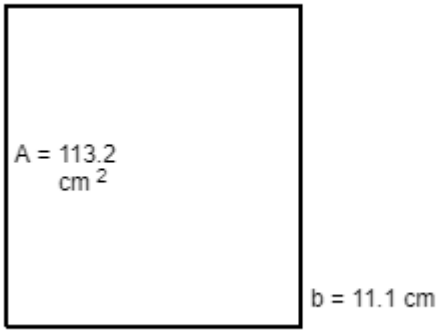
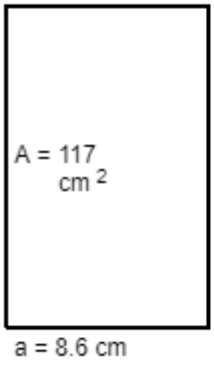
Aufgabe 4: Berechne die fehlende Seite und den Umfang des Rechtecks (Seiten a, b, u = Umfang, A = Flächeninhalt).

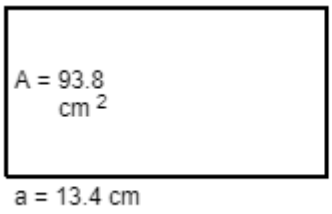
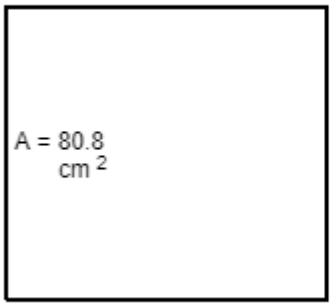
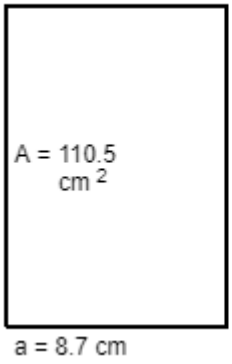
Nr.	*Gegeben* (Grafik)*:*
1	

2	 A = 57 cm 2 b = 7.7 cm
3	 A = 89 cm 2 b = 6.4 cm
4	 A = 54 cm 2 b = 7.1 cm
5	 A = 61.1 cm 2 a = 6.3 cm

6	 A = 58.6 cm 2 b = 6.3 cm
7	 A = 133.5 cm 2 b = 14.2 cm
8	 A = 87.2 cm 2 b = 8.3 cm
9	 A = 52.3 cm 2 a = 6.7 cm

10	 A = 39.3 cm 2 b = 5.7 cm
11	 A = 100 cm 2 b = 7.3 cm
12	 A = 47.8 cm 2 a = 5.2 cm
13	 A = 100.8 cm 2 b = 7 cm

14	 A = 153.5 cm 2 b = 11.9 cm
15	 A = 115.2 cm 2 b = 13.4 cm
16	 A = 113.2 cm 2 b = 11.1 cm
17	 A = 117 cm 2 a = 8.6 cm

18	
19	
20	

Vorgehensweise: Zur Ermittlung der fehlenden Größen beim Rechteck ist die obige Formelsammlung anzuwenden.

Lösungen:

Nr.	Gegeben:	Lösungen:
1	b = 9.3 cm, A = 65.1 cm^2	a = 7 cm, b = 9.3 cm, u = 32.6 cm, A = 65.1 cm^2
2	b = 7.7 cm, A = 57 cm^2	a = 7.4 cm, b = 7.7 cm, u = 30.2 cm, A = 57 cm^2
3	b = 6.4 cm, A = 89 cm^2	a = 13.9 cm, b = 6.4 cm, u = 40.6 cm, A = 89 cm^2
4	b = 7.1 cm, A = 54 cm^2	a = 7.6 cm, b = 7.1 cm, u = 29.4 cm, A = 54 cm^2
5	a = 6.3 cm, A = 61.1 cm^2	a = 6.3 cm, b = 9.7 cm, u = 32 cm, A = 61.1 cm^2
6	b = 6.3 cm, A = 58.6 cm^2	a = 9.3 cm, b = 6.3 cm, u = 31.2 cm, A = 58.6 cm^2
7	b = 14.2 cm, A = 133.5 cm^2	a = 9.4 cm, b = 14.2 cm, u = 47.2 cm, A = 133.5 cm^2
8	b = 8.3 cm, A = 87.2 cm^2	a = 10.5 cm, b = 8.3 cm, u = 37.6 cm, A = 87.2 cm^2
9	a = 6.7 cm, A = 52.3 cm^2	a = 6.7 cm, b = 7.8 cm, u = 29 cm, A = 52.3 cm^2
10	b = 5.7 cm, A = 39.3 cm^2	a = 6.9 cm, b = 5.7 cm, u = 25.2 cm, A = 39.3 cm^2

11	b = 7.3 cm, A = 100 cm^2	a = 13.7 cm, b = 7.3 cm, u = 42 cm, A = 100 cm^2
12	a = 5.2 cm, A = 47.8 cm^2	a = 5.2 cm, b = 9.2 cm, u = 28.8 cm, A = 47.8 cm^2
13	b = 7 cm, A = 100.8 cm^2	a = 14.4 cm, b = 7 cm, u = 42.8 cm, A = 100.8 cm^2
14	b = 11.9 cm, A = 153.5 cm^2	a = 12.9 cm, b = 11.9 cm, u = 49.6 cm, A = 153.5 cm^2
15	b = 13.4 cm, A = 115.2 cm^2	a = 8.6 cm, b = 13.4 cm, u = 44 cm, A = 115.2 cm^2
16	b = 11.1 cm, A = 113.2 cm^2	a = 10.2 cm, b = 11.1 cm, u = 42.6 cm, A = 113.2 cm^2
17	a = 8.6 cm, A = 117 cm^2	a = 8.6 cm, b = 13.6 cm, u = 44.4 cm, A = 117 cm^2
18	a = 13.4 cm, A = 93.8 cm^2	a = 13.4 cm, b = 7 cm, u = 40.8 cm, A = 93.8 cm^2
19	a = 9.4 cm, A = 80.8 cm^2	a = 9.4 cm, b = 8.6 cm, u = 36 cm, A = 80.8 cm^2
20	a = 8.7 cm, A = 110.5 cm^2	a = 8.7 cm, b = 12.7 cm, u = 42.8 cm, A = 110.5 cm^2

Aufgabe 5: Berechne die fehlende Seite und den Umfang des Rechtecks (Seiten a, b, u = Umfang, A = Flächeninhalt).

Nr.	*Gegeben:*
1	a = 18.3 m, A = 382.5 m^2
2	b = 7.4 m, A = 112.5 m^2
3	a = 7 dm, A = 166.6 dm^2
4	a = 10 dm, A = 181 dm^2
5	b = 6.4 dm, A = 53.1 dm^2
6	b = 24.4 cm, A = 144 cm^2
7	a = 22.6 cm, A = 264.4 cm^2
8	a = 20.7 cm, A = 285.7 cm^2
9	a = 14.3 cm, A = 348.9 cm^2
10	b = 12.4 cm, A = 250.5 cm^2
11	b = 6 mm, A = 47.4 mm^2
12	a = 20.4 m, A = 167.3 m^2
13	b = 9.8 m, A = 119.6 m^2
14	a = 16.1 cm, A = 228.6 cm^2
15	a = 10.1 m, A = 241.4 m^2
16	b = 22.7 mm, A = 301.9 mm^2
17	a = 7.6 m, A = 96.5 m^2
18	b = 24.6 cm, A = 127.9 cm^2
19	a = 22.7 mm, A = 533.4 mm^2
20	b = 19.1 dm, A = 122.2 dm^2
21	a = 8.7 m, A = 146.2 m^2
22	b = 24 dm, A = 549.6 dm^2
23	b = 11.2 cm, A = 166.9 cm^2
24	a = 22.3 m, A = 307.7 m^2
25	a = 19.9 cm, A = 421.9 cm^2

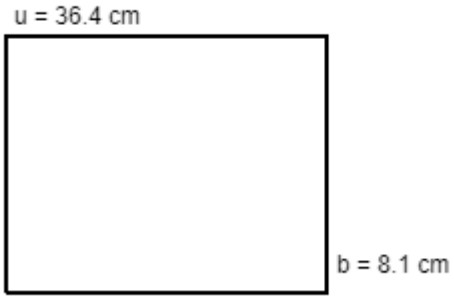
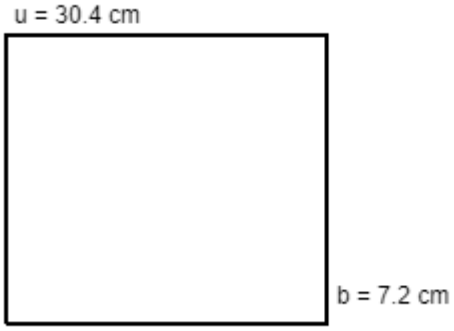
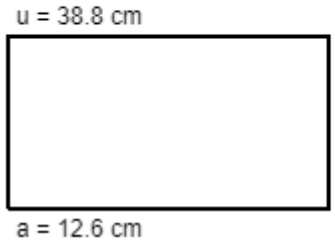
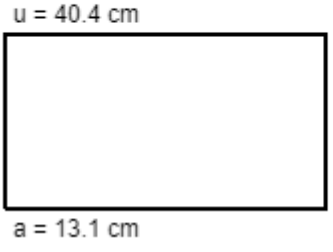
26	b = 21.5 m, A = 111.8 m^2
27	a = 24.9 mm, A = 221.6 mm^2
28	b = 11.7 dm, A = 74.9 dm^2
29	b = 22.6 cm, A = 259.9 cm^2
30	a = 5.2 cm, A = 46.8 cm^2

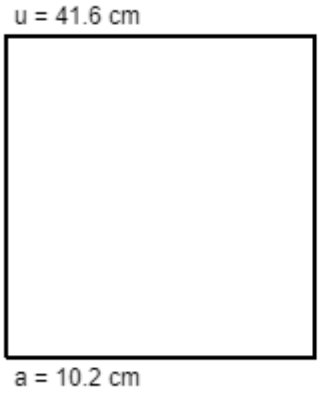
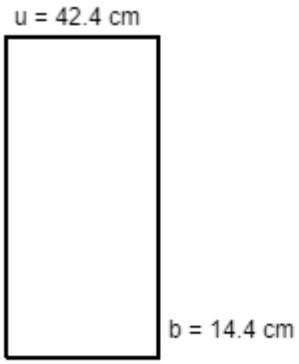
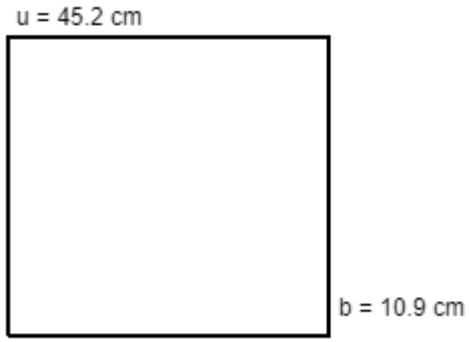
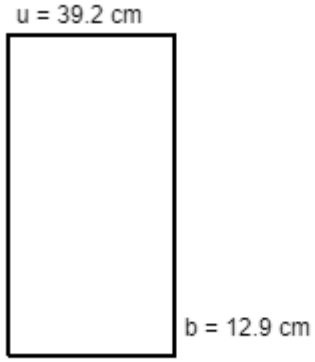
Vorgehensweise: Zur Ermittlung der fehlenden Größen beim Rechteck ist die obige Formelsammlung anzuwenden.

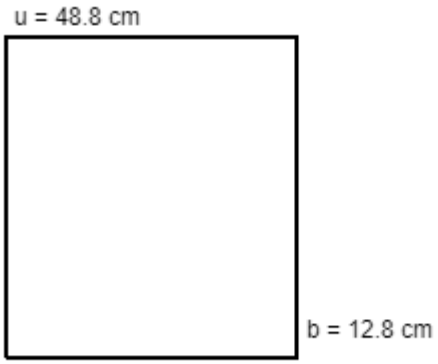
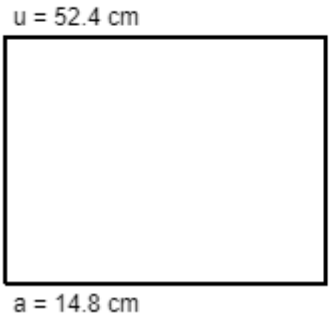
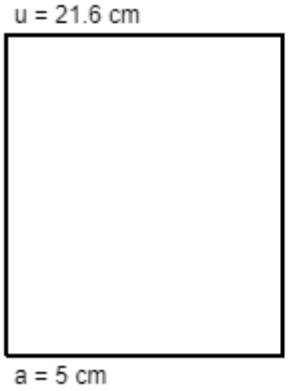
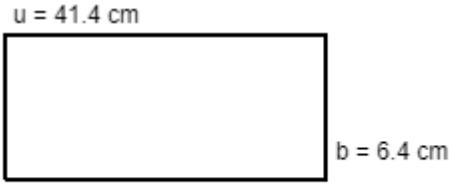
Lösungen:

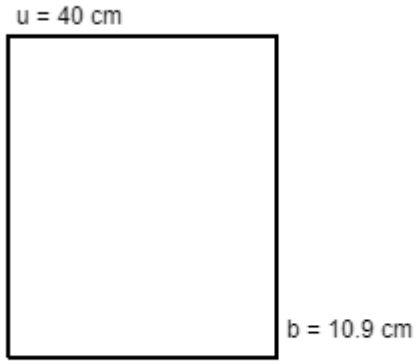
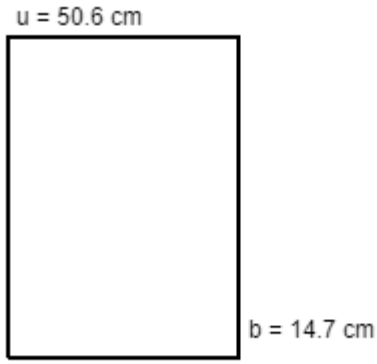
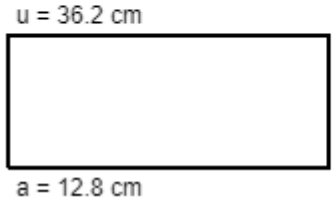
Nr.	*Gegeben:*	*Lösungen:*
1	a = 18.3 m, A = 382.5 m^2	a = 18.3 m, b = 20.9 m, u = 78.4 m, A = 382.5 m^2
2	b = 7.4 m, A = 112.5 m^2	a = 15.2 m, b = 7.4 m, u = 45.2 m, A = 112.5 m^2
3	a = 7 dm, A = 166.6 dm^2	a = 7 dm, b = 23.8 dm, u = 61.6 dm, A = 166.6 dm^2
4	a = 10 dm, A = 181 dm^2	a = 10 dm, b = 18.1 dm, u = 56.2 dm, A = 181 dm^2
5	b = 6.4 dm, A = 53.1 dm^2	a = 8.3 dm, b = 6.4 dm, u = 29.4 dm, A = 53.1 dm^2
6	b = 24.4 cm, A = 144 cm^2	a = 5.9 cm, b = 24.4 cm, u = 60.6 cm, A = 144 cm^2
7	a = 22.6 cm, A = 264.4 cm^2	a = 22.6 cm, b = 11.7 cm, u = 68.6 cm, A = 264.4 cm^2
8	a = 20.7 cm, A = 285.7 cm^2	a = 20.7 cm, b = 13.8 cm, u = 69 cm, A = 285.7 cm^2
9	a = 14.3 cm, A = 348.9 cm^2	a = 14.3 cm, b = 24.4 cm, u = 77.4 cm, A = 348.9 cm^2
10	b = 12.4 cm, A = 250.5 cm^2	a = 20.2 cm, b = 12.4 cm, u = 65.2 cm, A = 250.5 cm^2
11	b = 6 mm, A = 47.4 mm^2	a = 7.9 mm, b = 6 mm, u = 27.8 mm, A = 47.4 mm^2
12	a = 20.4 m, A = 167.3 m^2	a = 20.4 m, b = 8.2 m, u = 57.2 m, A = 167.3 m^2
13	b = 9.8 m, A = 119.6 m^2	a = 12.2 m, b = 9.8 m, u = 44 m, A = 119.6 m^2
14	a = 16.1 cm, A = 228.6 cm^2	a = 16.1 cm, b = 14.2 cm, u = 60.6 cm, A = 228.6 cm^2
15	a = 10.1 m, A = 241.4 m^2	a = 10.1 m, b = 23.9 m, u = 68 m, A = 241.4 m^2
16	b = 22.7 mm, A = 301.9 mm^2	a = 13.3 mm, b = 22.7 mm, u = 72 mm, A = 301.9 mm^2
17	a = 7.6 m, A = 96.5 m^2	a = 7.6 m, b = 12.7 m, u = 40.6 m, A = 96.5 m^2
18	b = 24.6 cm, A = 127.9 cm^2	a = 5.2 cm, b = 24.6 cm, u = 59.6 cm, A = 127.9 cm^2
19	a = 22.7 mm, A = 533.4 mm^2	a = 22.7 mm, b = 23.5 mm, u = 92.4 mm, A = 533.4 mm^2
20	b = 19.1 dm, A = 122.2 dm^2	a = 6.4 dm, b = 19.1 dm, u = 51 dm, A = 122.2 dm^2
21	a = 8.7 m, A = 146.2 m^2	a = 8.7 m, b = 16.8 m, u = 51 m, A = 146.2 m^2
22	b = 24 dm, A = 549.6 dm^2	a = 22.9 dm, b = 24 dm, u = 93.8 dm, A = 549.6 dm^2
23	b = 11.2 cm, A = 166.9 cm^2	a = 14.9 cm, b = 11.2 cm, u = 52.2 cm, A = 166.9 cm^2
24	a = 22.3 m, A = 307.7 m^2	a = 22.3 m, b = 13.8 m, u = 72.2 m, A = 307.7 m^2
25	a = 19.9 cm, A = 421.9 cm^2	a = 19.9 cm, b = 21.2 cm, u = 82.2 cm, A = 421.9 cm^2
26	b = 21.5 m, A = 111.8 m^2	a = 5.2 m, b = 21.5 m, u = 53.4 m, A = 111.8 m^2
27	a = 24.9 mm, A = 221.6 mm^2	a = 24.9 mm, b = 8.9 mm, u = 67.6 mm, A = 221.6 mm^2
28	b = 11.7 dm, A = 74.9 dm^2	a = 6.4 dm, b = 11.7 dm, u = 36.2 dm, A = 74.9 dm^2
29	b = 22.6 cm, A = 259.9 cm^2	a = 11.5 cm, b = 22.6 cm, u = 68.2 cm, A = 259.9 cm^2
30	a = 5.2 cm, A = 46.8 cm^2	a = 5.2 cm, b = 9 cm, u = 28.4 cm, A = 46.8 cm^2

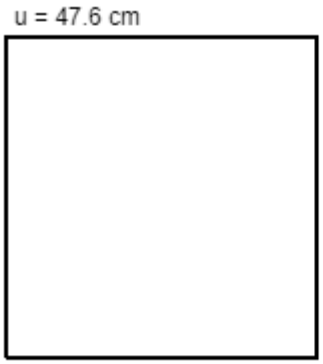
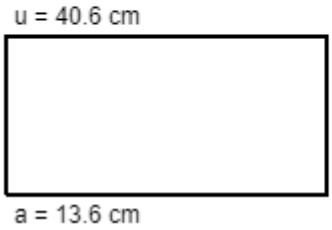
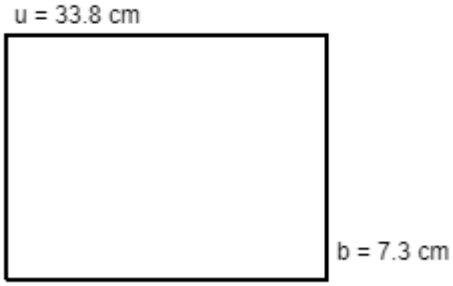
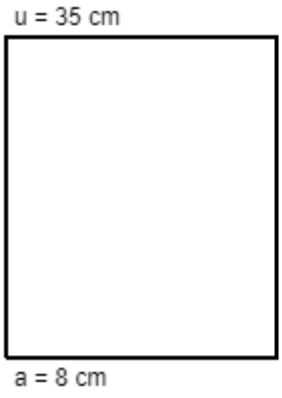
Aufgabe 6: Berechne die fehlende Seite und den Umfang des Rechtecks (Seiten a, b, u = Umfang, A = Flächeninhalt).

Nr.	*Gegeben* (Grafik)*:*
1	
2	
3	
4	

5	 u = 41.6 cm a = 10.2 cm
6	 u = 42.4 cm b = 14.4 cm
7	 u = 45.2 cm b = 10.9 cm
8	 u = 39.2 cm b = 12.9 cm

9	 u = 48.8 cm b = 12.8 cm
10	 u = 52.4 cm a = 14.8 cm
11	 u = 21.6 cm a = 5 cm
12	 u = 41.4 cm b = 6.4 cm

13	 u = 40 cm b = 10.9 cm
14	 u = 50.6 cm b = 14.7 cm
15	 u = 36.2 cm a = 12.8 cm
16	 u = 38.2 cm b = 6.6 cm

17	
18	
19	
20	

Vorgehensweise: Zur Ermittlung der fehlenden Größen beim Rechteck ist die obige Formelsammlung anzuwenden.

Lösungen:

Nr.	Gegeben:	Lösungen:
1	b = 8.1 cm, u = 36.4 cm	a = 10.1 cm, b = 8.1 cm, u = 36.4 cm, A = 81.8 cm^2
2	b = 7.2 cm, u = 30.4 cm	a = 8 cm, b = 7.2 cm, u = 30.4 cm, A = 57.6 cm^2
3	a = 12.6 cm, u = 38.8 cm	a = 12.6 cm, b = 6.8 cm, u = 38.8 cm, A = 85.7 cm^2
4	a = 13.1 cm, u = 40.4 cm	a = 13.1 cm, b = 7.1 cm, u = 40.4 cm, A = 93 cm^2
5	a = 10.2 cm, u = 41.6 cm	a = 10.2 cm, b = 10.6 cm, u = 41.6 cm, A = 108.1 cm^2
6	b = 14.4 cm, u = 42.4 cm	a = 6.8 cm, b = 14.4 cm, u = 42.4 cm, A = 97.9 cm^2
7	b = 10.9 cm, u = 45.2 cm	a = 11.7 cm, b = 10.9 cm, u = 45.2 cm, A = 127.5 cm^2
8	b = 12.9 cm, u = 39.2 cm	a = 6.7 cm, b = 12.9 cm, u = 39.2 cm, A = 86.4 cm^2
9	b = 12.8 cm, u = 48.8 cm	a = 11.6 cm, b = 12.8 cm, u = 48.8 cm, A = 148.5 cm^2
10	a = 14.8 cm, u = 52.4 cm	a = 14.8 cm, b = 11.4 cm, u = 52.4 cm, A = 168.7 cm^2
11	a = 5 cm, u = 21.6 cm	a = 5 cm, b = 5.8 cm, u = 21.6 cm, A = 29 cm^2
12	b = 6.4 cm, u = 41.4 cm	a = 14.3 cm, b = 6.4 cm, u = 41.4 cm, A = 91.5 cm^2
13	b = 10.9 cm, u = 40 cm	a = 9.1 cm, b = 10.9 cm, u = 40 cm, A = 99.2 cm^2
14	b = 14.7 cm, u = 50.6 cm	a = 10.6 cm, b = 14.7 cm, u = 50.6 cm, A = 155.8 cm^2
15	a = 12.8 cm, u = 36.2 cm	a = 12.8 cm, b = 5.3 cm, u = 36.2 cm, A = 67.8 cm^2
16	b = 6.6 cm, u = 38.2 cm	a = 12.5 cm, b = 6.6 cm, u = 38.2 cm, A = 82.5 cm^2
17	a = 11.7 cm, u = 47.6 cm	a = 11.7 cm, b = 12.1 cm, u = 47.6 cm, A = 141.6 cm^2
18	a = 13.6 cm, u = 40.6 cm	a = 13.6 cm, b = 6.7 cm, u = 40.6 cm, A = 91.1 cm^2
19	b = 7.3 cm, u = 33.8 cm	a = 9.6 cm, b = 7.3 cm, u = 33.8 cm, A = 70.1 cm^2
20	a = 8 cm, u = 35 cm	a = 8 cm, b = 9.5 cm, u = 35 cm, A = 76 cm^2

Aufgabe 7: Berechne die fehlende Seite und den Umfang des Rechtecks (Seiten a, b, u = Umfang, A = Flächeninhalt).

Nr.	Gegeben:
1	a = 10.1 dm, u = 59.6 dm
2	b = 20.2 m, u = 51.8 m
3	a = 14.4 m, u = 40.4 m
4	a = 6.8 cm, u = 48.6 cm
5	a = 7.2 m, u = 60.2 m
6	a = 8.1 mm, u = 49 mm
7	b = 5.3 cm, u = 29.4 cm
8	b = 5.1 cm, u = 32.6 cm
9	a = 5.3 cm, u = 43 cm
10	b = 19.7 cm, u = 79.8 cm
11	b = 7.4 mm, u = 41 mm
12	a = 22.9 dm, u = 91.2 dm
13	a = 18.6 dm, u = 49.8 dm
14	b = 14.3 m, u = 44.2 m
15	a = 9.4 m, u = 59.8 m
16	a = 10.3 cm, u = 54.8 cm

17	a = 8.6 m, u = 59.2 m
18	a = 17.7 mm, u = 53.4 mm
19	b = 24.5 cm, u = 75.6 cm
20	a = 11.3 cm, u = 52.4 cm
21	b = 9.1 m, u = 41.2 m
22	b = 8.2 mm, u = 53 mm
23	b = 11.4 dm, u = 37.8 dm
24	a = 10.9 cm, u = 68.4 cm
25	b = 24 m, u = 62.4 m
26	b = 10 m, u = 56 m
27	a = 17.8 mm, u = 79.4 mm
28	a = 18 dm, u = 80.8 dm
29	b = 17.6 m, u = 79.8 m
30	b = 5.4 mm, u = 56.2 mm

Vorgehensweise: Zur Ermittlung der fehlenden Größen beim Rechteck ist die obige Formelsammlung anzuwenden.

Lösungen:

Nr.	*Gegeben:*	*Lösungen:*
1	a = 10.1 dm, u = 59.6 dm	a = 10.1 dm, b = 19.7 dm, u = 59.6 dm, A = 199 dm^2
2	b = 20.2 m, u = 51.8 m	a = 5.7 m, b = 20.2 m, u = 51.8 m, A = 115.1 m^2
3	a = 14.4 m, u = 40.4 m	a = 14.4 m, b = 5.8 m, u = 40.4 m, A = 83.5 m^2
4	a = 6.8 cm, u = 48.6 cm	a = 6.8 cm, b = 17.5 cm, u = 48.6 cm, A = 119 cm^2
5	a = 7.2 m, u = 60.2 m	a = 7.2 m, b = 22.9 m, u = 60.2 m, A = 164.9 m^2
6	a = 8.1 mm, u = 49 mm	a = 8.1 mm, b = 16.4 mm, u = 49 mm, A = 132.8 mm^2
7	b = 5.3 cm, u = 29.4 cm	a = 9.4 cm, b = 5.3 cm, u = 29.4 cm, A = 49.8 cm^2
8	b = 5.1 cm, u = 32.6 cm	a = 11.2 cm, b = 5.1 cm, u = 32.6 cm, A = 57.1 cm^2
9	a = 5.3 cm, u = 43 cm	a = 5.3 cm, b = 16.2 cm, u = 43 cm, A = 85.9 cm^2
10	b = 19.7 cm, u = 79.8 cm	a = 20.2 cm, b = 19.7 cm, u = 79.8 cm, A = 397.9 cm^2
11	b = 7.4 mm, u = 41 mm	a = 13.1 mm, b = 7.4 mm, u = 41 mm, A = 96.9 mm^2
12	a = 22.9 dm, u = 91.2 dm	a = 22.9 dm, b = 22.7 dm, u = 91.2 dm, A = 519.8 dm^2
13	a = 18.6 dm, u = 49.8 dm	a = 18.6 dm, b = 6.3 dm, u = 49.8 dm, A = 117.2 dm^2
14	b = 14.3 m, u = 44.2 m	a = 7.8 m, b = 14.3 m, u = 44.2 m, A = 111.5 m^2
15	a = 9.4 m, u = 59.8 m	a = 9.4 m, b = 20.5 m, u = 59.8 m, A = 192.7 m^2
16	a = 10.3 cm, u = 54.8 cm	a = 10.3 cm, b = 17.1 cm, u = 54.8 cm, A = 176.1 cm^2
17	a = 8.6 m, u = 59.2 m	a = 8.6 m, b = 21 m, u = 59.2 m, A = 180.6 m^2
18	a = 17.7 mm, u = 53.4 mm	a = 17.7 mm, b = 9 mm, u = 53.4 mm, A = 159.3 mm^2
19	b = 24.5 cm, u = 75.6 cm	a = 13.3 cm, b = 24.5 cm, u = 75.6 cm, A = 325.9 cm^2
20	a = 11.3 cm, u = 52.4 cm	a = 11.3 cm, b = 14.9 cm, u = 52.4 cm, A = 168.4 cm^2
21	b = 9.1 m, u = 41.2 m	a = 11.5 m, b = 9.1 m, u = 41.2 m, A = 104.7 m^2
22	b = 8.2 mm, u = 53 mm	a = 18.3 mm, b = 8.2 mm, u = 53 mm, A = 150.1 mm^2
23	b = 11.4 dm, u = 37.8 dm	a = 7.5 dm, b = 11.4 dm, u = 37.8 dm, A = 85.5 dm^2
24	a = 10.9 cm, u = 68.4 cm	a = 10.9 cm, b = 23.3 cm, u = 68.4 cm, A = 254 cm^2
25	b = 24 m, u = 62.4 m	a = 7.2 m, b = 24 m, u = 62.4 m, A = 172.8 m^2

26	b = 10 m, u = 56 m	a = 18 m, b = 10 m, u = 56 m, A = 180 m^2
27	a = 17.8 mm, u = 79.4 mm	a = 17.8 mm, b = 21.9 mm, u = 79.4 mm, A = 389.8 mm^2
28	a = 18 dm, u = 80.8 dm	a = 18 dm, b = 22.4 dm, u = 80.8 dm, A = 403.2 dm^2
29	b = 17.6 m, u = 79.8 m	a = 22.3 m, b = 17.6 m, u = 79.8 m, A = 392.5 m^2
30	b = 5.4 mm, u = 56.2 mm	a = 22.7 mm, b = 5.4 mm, u = 56.2 mm, A = 122.6 mm^2