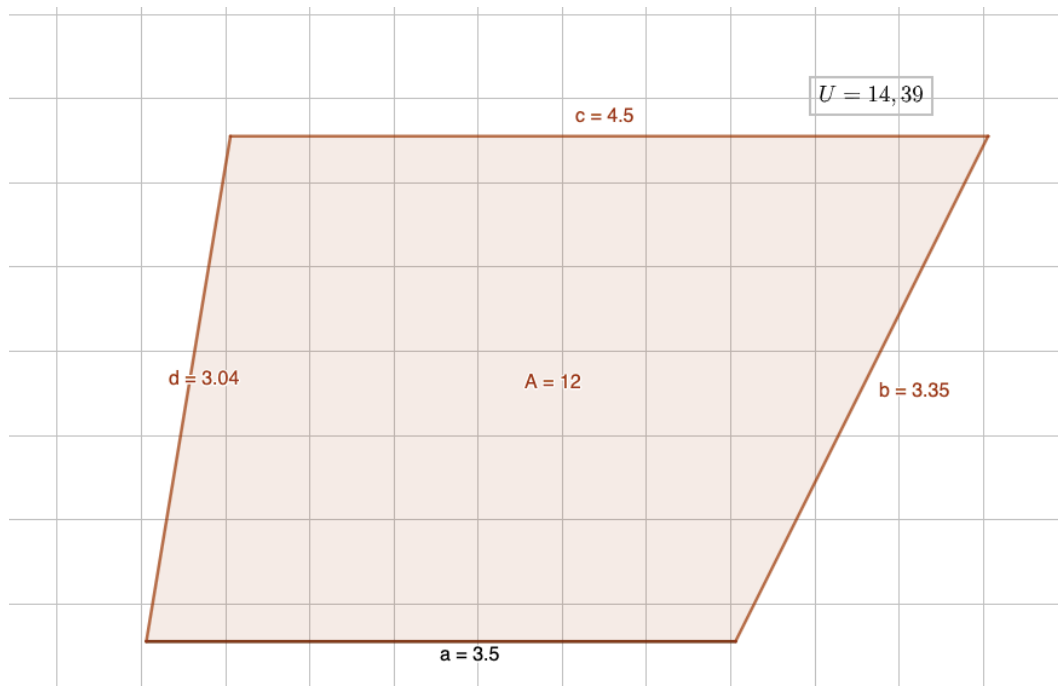


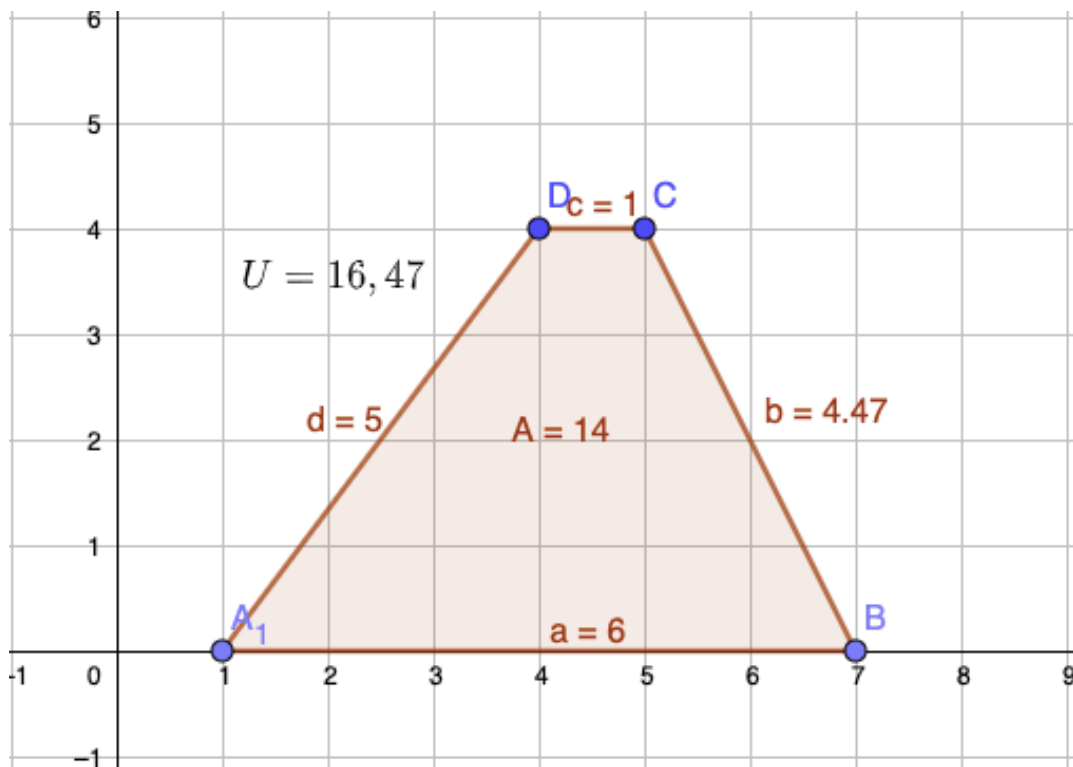
## B.S.204 – Lösung

2.

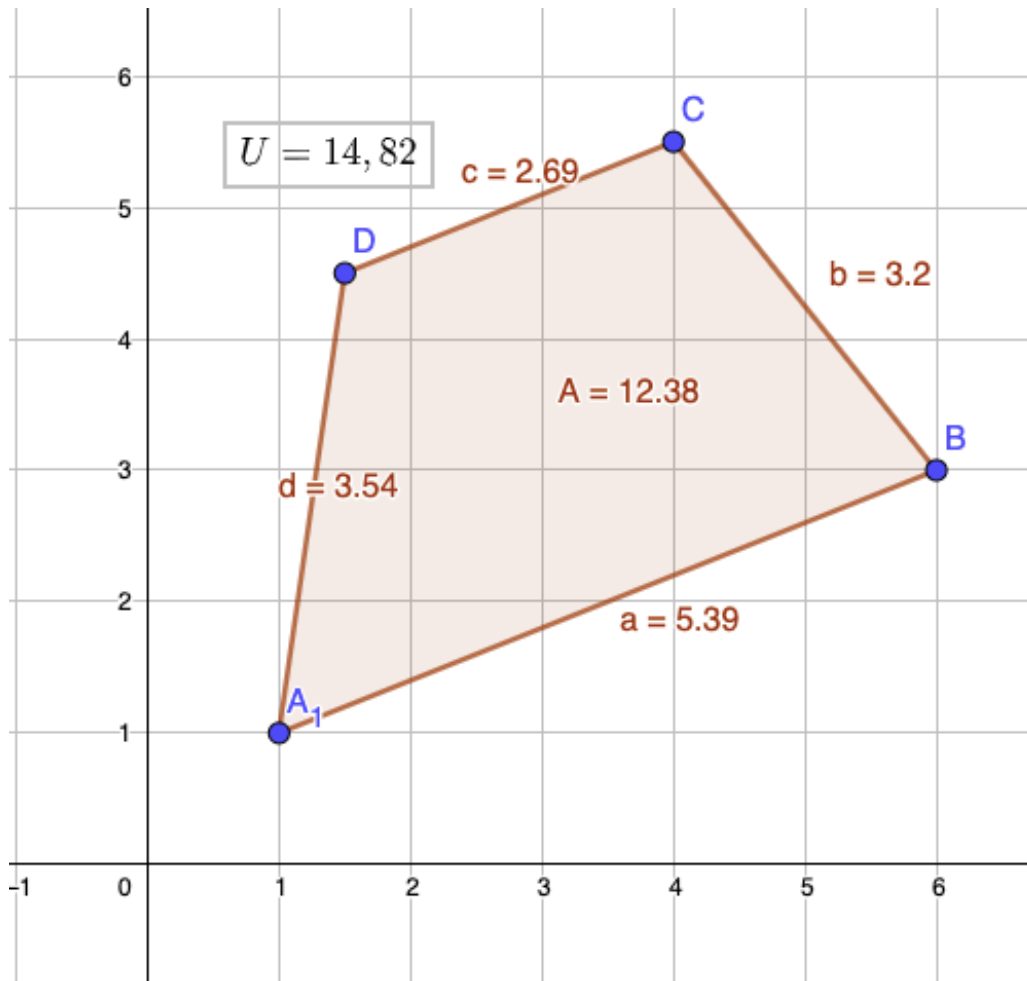


3.

a)



b)



4.

a)  $a = 2,2\text{cm}$ ;  $b = 1,9\text{cm}$ ;  $c = 1\text{cm}$ ;  $d = 1,9\text{cm}$ ;  $h = 1,8\text{cm}$

$$A = \frac{1}{2} \cdot (a + c) \cdot h = \frac{1}{2} (2,2\text{cm} + 1\text{cm}) \cdot 1,8\text{cm} = 2,88\text{cm}^2, U = a + b + c + d = 7\text{cm}$$

b)  $a = 2,8\text{cm}$ ;  $b = 2\text{cm}$ ;  $c = 1,8\text{cm}$ ;  $d = 1,8\text{cm}$ ;  $h = 1,8\text{cm}$

$$A = \frac{1}{2} \cdot (a + c) \cdot h = \frac{1}{2} (2,8\text{cm} + 1,8\text{cm}) \cdot 1,8\text{cm} = 4,14\text{cm}^2, U = a + b + c + d = 8,4\text{cm}$$

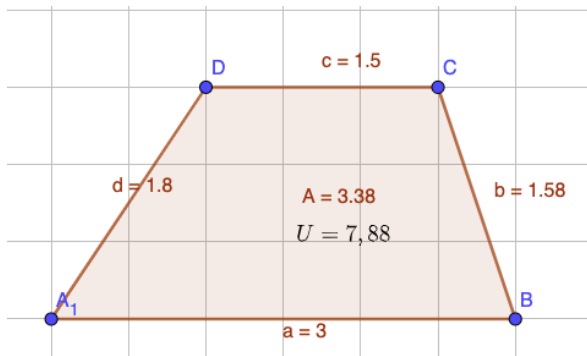
c)  $a = 4,4\text{cm}$ ;  $b = 2,3\text{cm}$ ;  $c = 2,2\text{cm}$ ;  $d = 1,9\text{cm}$ ;  $h = 1,8\text{cm}$

$$A = \frac{1}{2} \cdot (a + c) \cdot h = \frac{1}{2} (4,4\text{cm} + 2,2\text{cm}) \cdot 1,8\text{cm} = 5,94\text{cm}^2$$

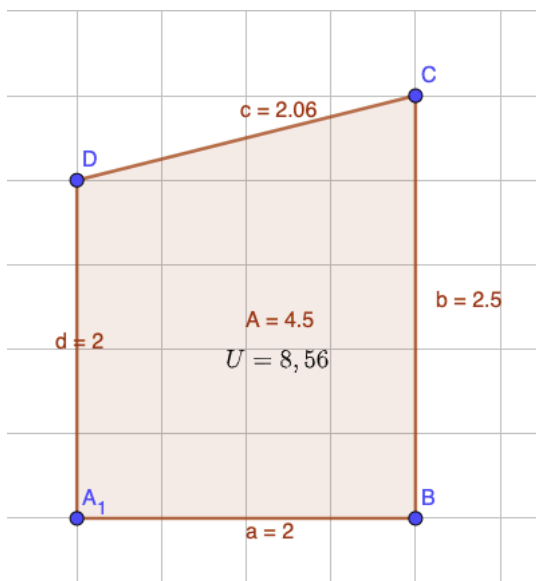
$$, U = a + b + c + d = 10,8\text{cm}$$

5.

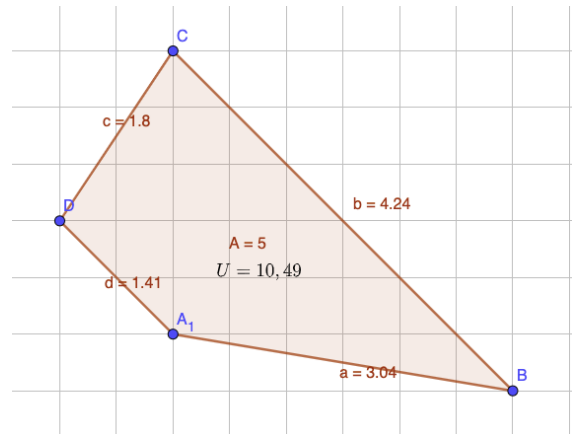
a)



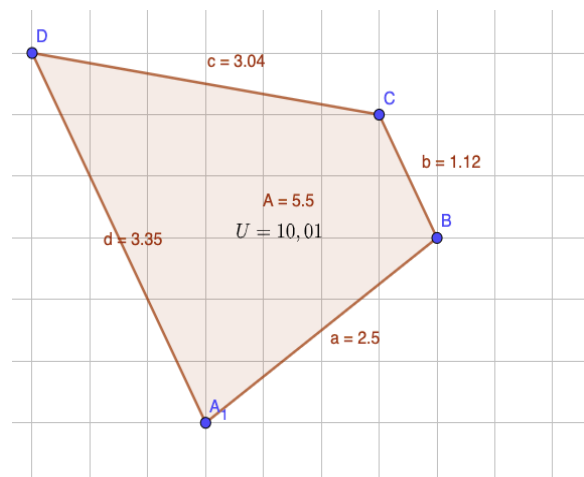
b)



c)

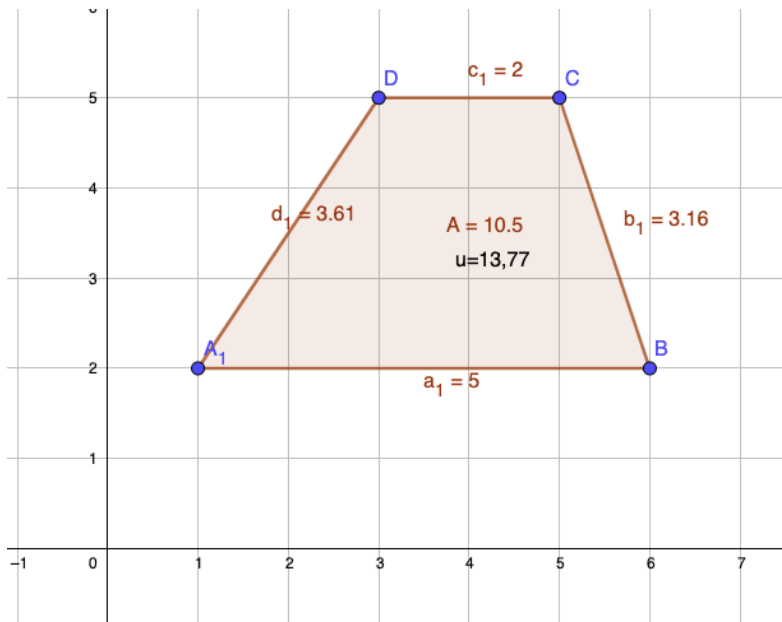


d)

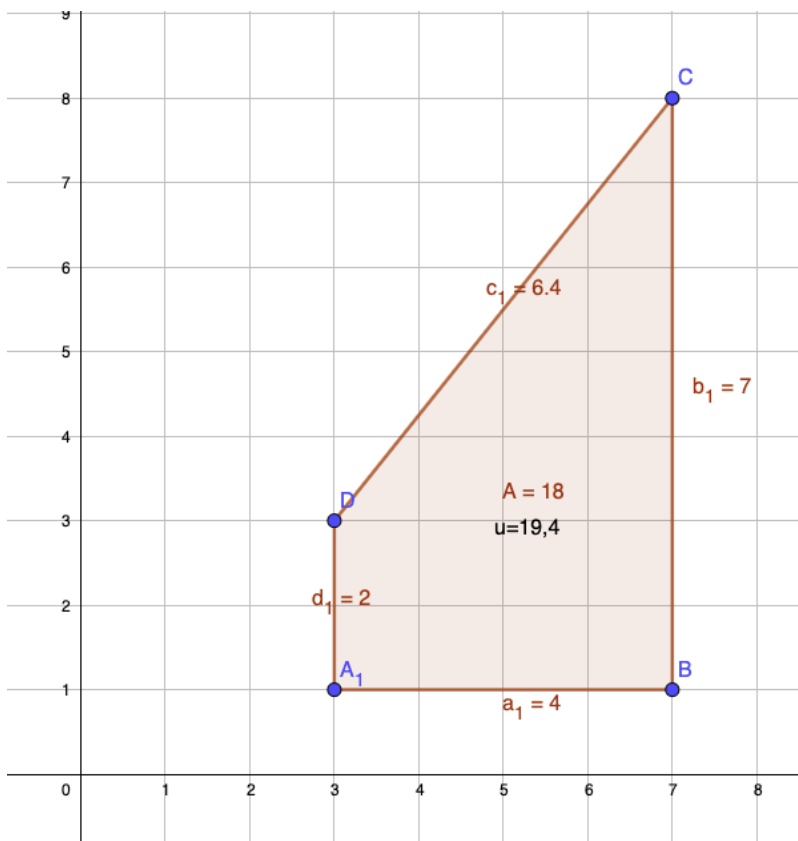


6.

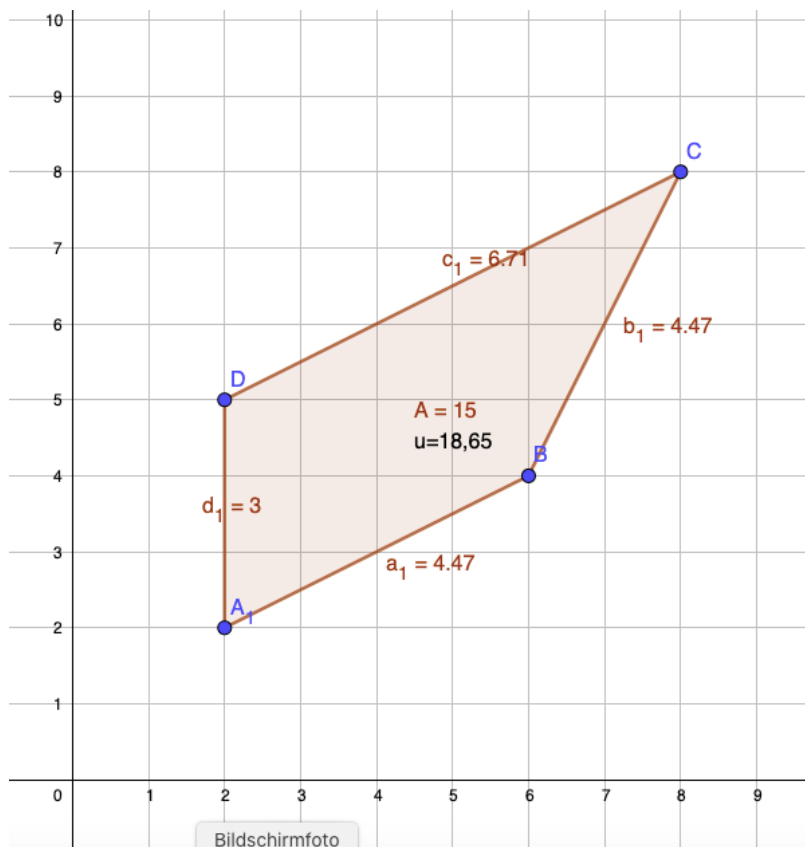
a)



b)



c)



7.

$$a = 3\text{cm}, c = 5\text{cm}$$

$$A = 14\text{cm}^2$$

$$\text{a) } h = \frac{2A}{a+c} = \frac{2 \cdot 14\text{cm}^2}{3\text{cm}+5\text{cm}} = \frac{28\text{cm}^2}{8\text{cm}} = 3,5\text{cm}$$

b) Doppelter Flächeninhalt

$$A = 28\text{cm}^2$$

a ist die kürzere Seite, c bleibt gleich: also  $c = 5\text{cm}$

$$h = 3,5\text{cm}$$

$$A = \frac{1}{2}(a+c) \cdot h$$

$$a = \frac{2A}{h} - c = 11\text{cm}$$

a müsste um  $8\text{cm}$  verlängert werden.

8.

$$a = 5\text{m}, b = 3\text{m}, h = 2,5\text{m}$$

$$A = 2 \cdot A_{\text{Trapez}} = 2 \cdot \frac{1}{2}(a+c) \cdot h = (a+c) \cdot h$$

$$A = (5\text{m} + 3\text{m}) \cdot 2,5\text{m} = 8\text{m} \cdot 2,5\text{m} = 20\text{m}^2$$