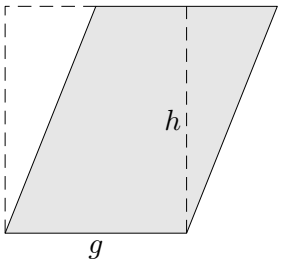
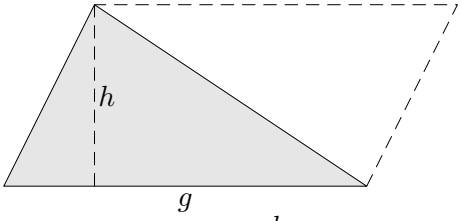
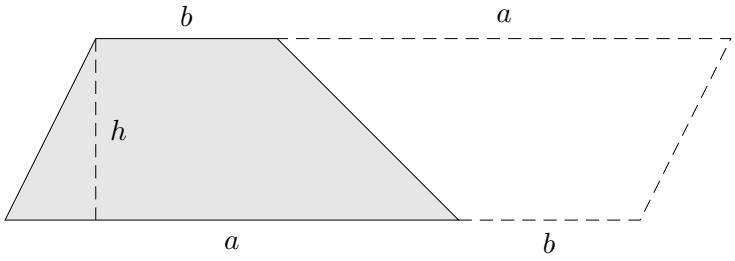
Flächenberechnung



$A = g \cdot h$

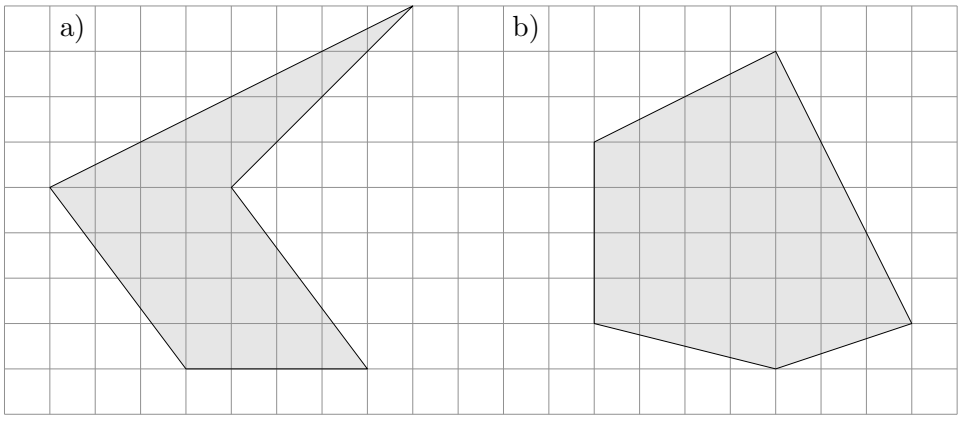


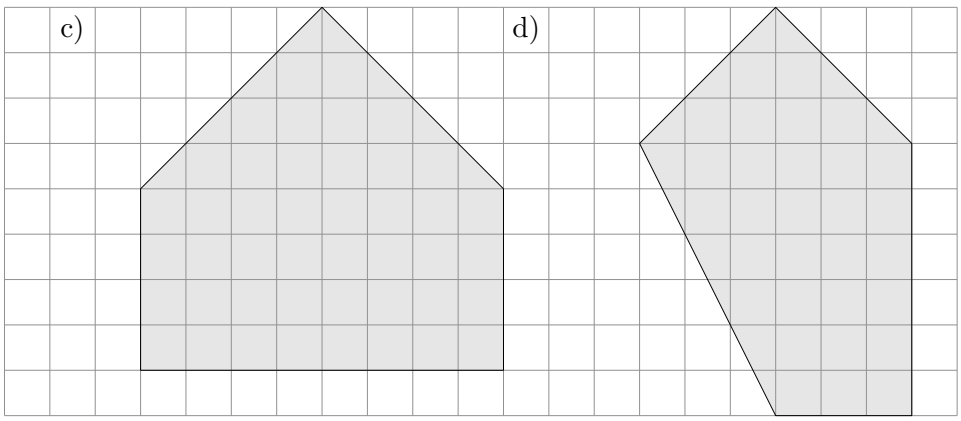
$A = \frac{g \cdot h}{2}$



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

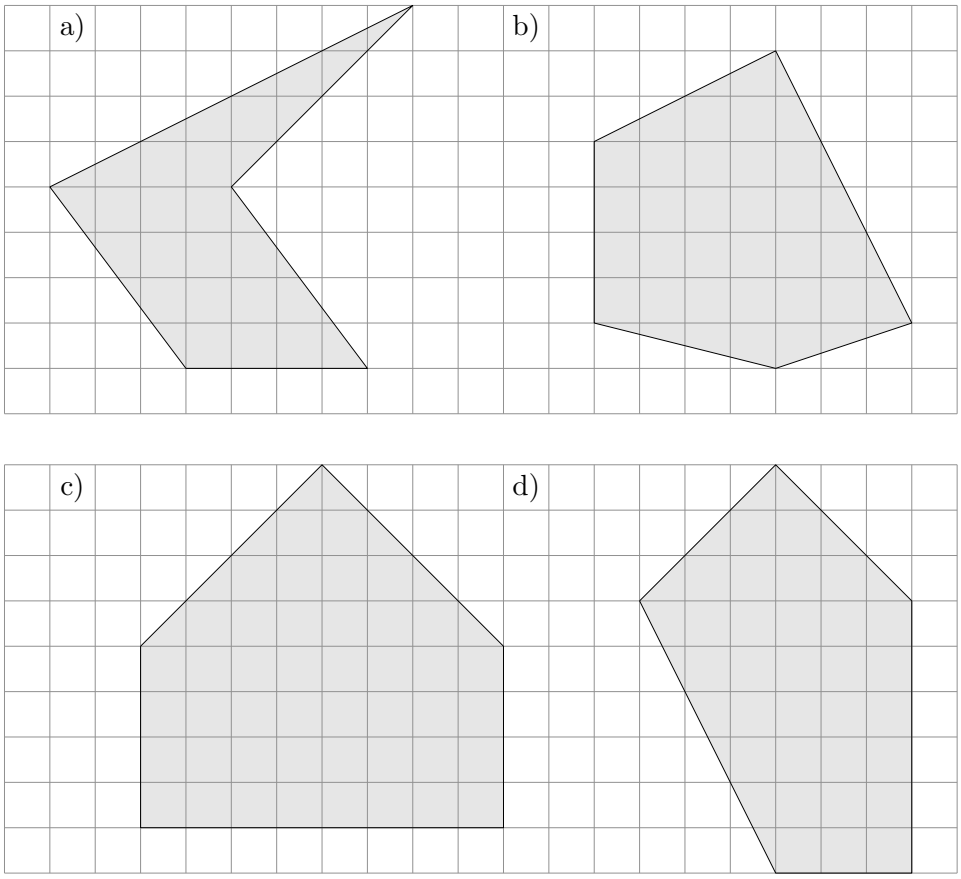
1. Übertrage die Figuren in dein Heft und bestimme den Flächeninhalt (2 Kästchen $1cm$).





Flächenberechnung

1. Übertrage die Figuren in dein Heft und bestimme den Flächeninhalt (2 Kästchen $1\,cm$).



1. a) $A = 6\ (cm^2)$ *waagerecht geteilt*

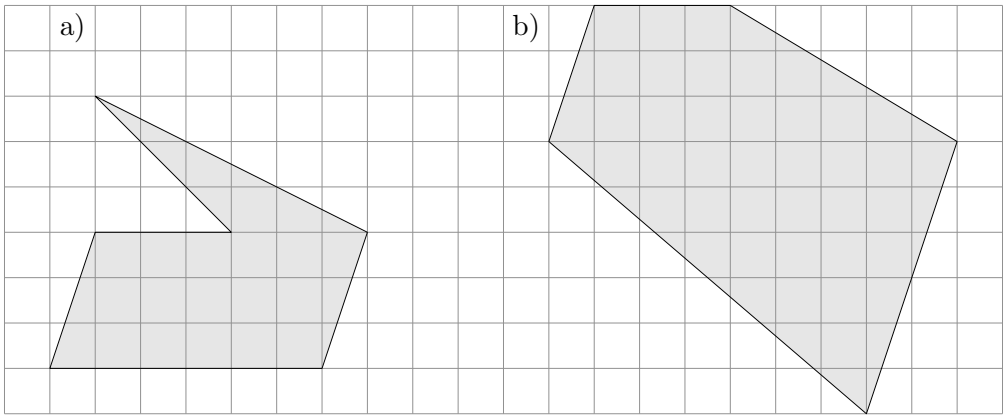
   b) $A = 8{,}125\ (cm^2)$ *senkrecht geteilt*

   c) $A = 12\ (cm^2)$

   d) $A = 9\ (cm^2)$

Flächenberechnung

2. Übertrage die Figuren in dein Heft und bestimme den Flächeninhalt (2 Kästchen $1\,cm$).



2. a) $A = 5{,}625\ (cm^2)$

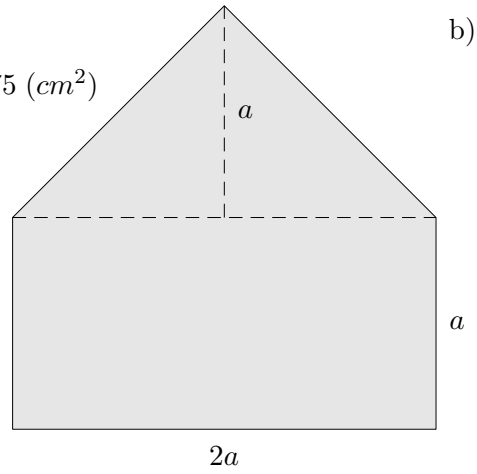
   b) $A = 11{,}25\ (cm^2)$

Rückwärtsrechnen

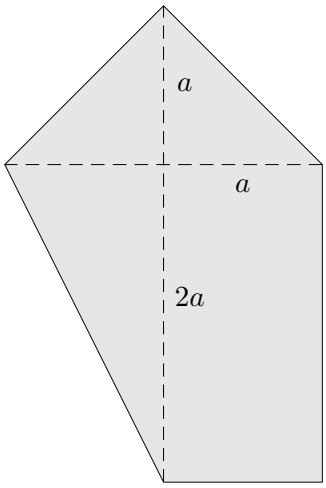
3. Wie müsste a gewählt werden, damit der angegebene Flächeninhalt vorliegt?

a)

$A = 75\ (cm^2)$



b)

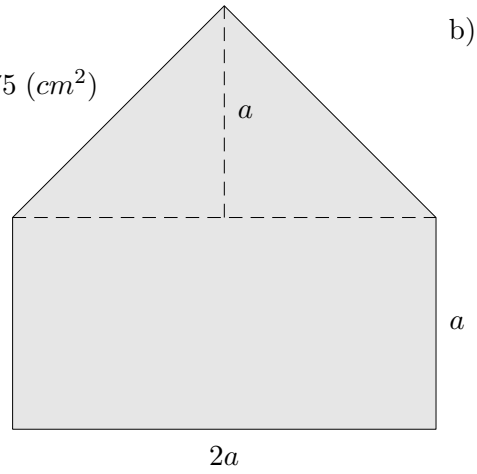


$A = 64\ (cm^2)$

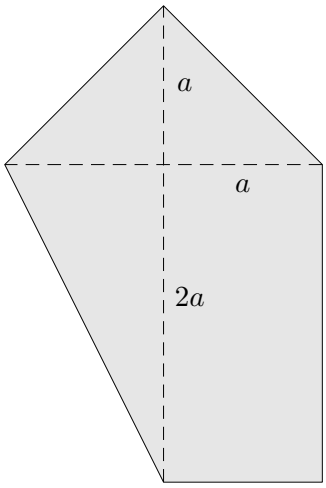
Rückwärtsrechnen

3. Wie müsste a gewählt werden, damit der angegebene Flächeninhalt vorliegt?

a) $A = 75\ (cm^2)$



b)



$A = 64\ (cm^2)$

3. a)
$$\begin{aligned} 2a^2 + a^2 &= 75 \\ 3a^2 &= 75 \quad | : 3 \\ a^2 &= 25 \\ a &= 5 \end{aligned}$$

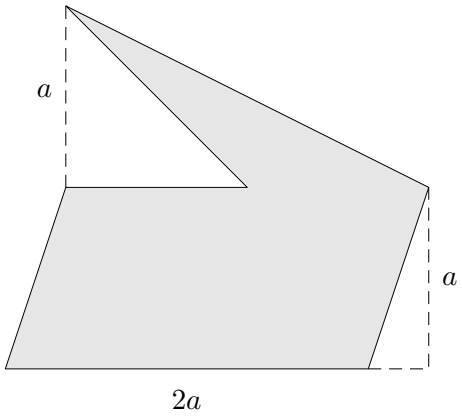
b)
$$\begin{aligned} a^2 + 2a^2 + \frac{2^1 a \cdot a}{2_1} &= 64 \\ 4a^2 &= 64 \quad | : 4 \\ a^2 &= 16 \\ a &= 4 \end{aligned}$$

Rückwärtsrechnen

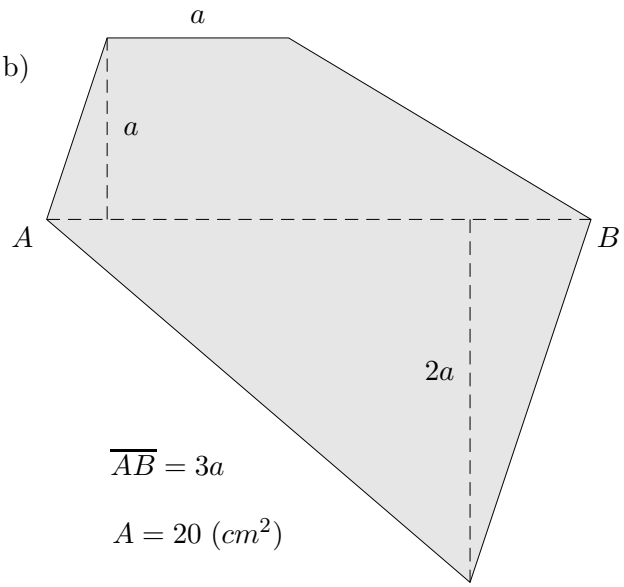
4. Wie müsste a gewählt werden, damit der angegebene Flächeninhalt vorliegt?

a)

$A = 90\ (cm^2)$



b)



$\overline{AB} = 3a$

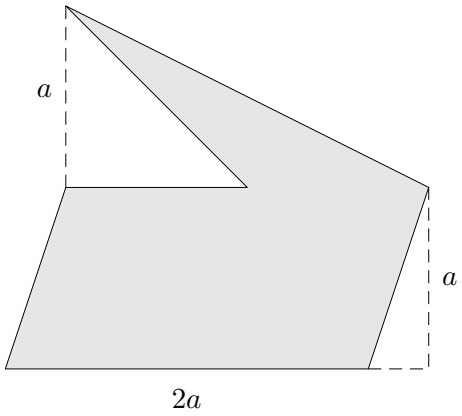
$A = 20\ (cm^2)$

Rückwärtsrechnen

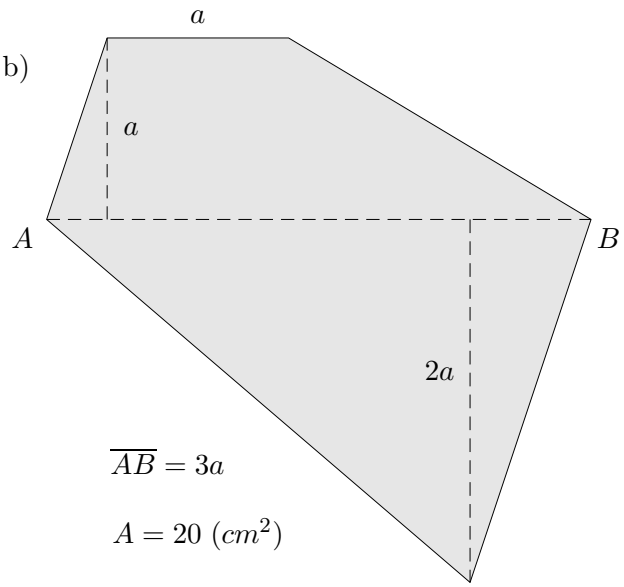
4. Wie müsste a gewählt werden, damit der angegebene Flächeninhalt vorliegt?

a)

$A = 90\ (cm^2)$



b)



$\overline{AB} = 3a$

$A = 20\ (cm^2)$

4. a)
$$\begin{aligned} 2a^2 + \frac{a^2}{2} &= 90 \quad | \cdot 2 \\ 4a^2 + a^2 &= 180 \\ 5a^2 &= 180 \quad | : 5 \\ a^2 &= 36 \\ a &= 6 \end{aligned}$$

b)
$$\begin{aligned} \frac{3a + a}{2} \cdot a + \frac{3a \cdot \not{2}^{1} a}{\not{2}_{1}} &= 20 \\ \frac{\not{4}^{2} a}{\not{2}_{1}} \cdot a + 3a^2 &= 20 \\ 2a^2 + 3a^2 &= 20 \\ 5a^2 &= 20 \quad | : 5 \\ a^2 &= 4 \\ a &= 2 \end{aligned}$$