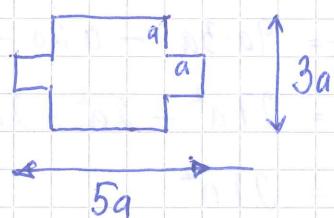


# Röd kurs Areauttryck

S. 103

30



$$\begin{aligned} \textcircled{1} \quad A &= 5a \cdot 3a - 4 \cdot a \cdot a \\ &= 15a^2 - 4a^2 \\ &= 11a^2 \end{aligned}$$

$$\boxed{5a \cdot 3a} \quad \frac{3a}{5a} - \left( \boxed{a} + \boxed{a} + \boxed{a} + \boxed{a} \right)$$

$$\begin{aligned} \textcircled{2} \quad A &= 3a \cdot 3a + a \cdot a + a \cdot a \\ &= 9a^2 + a^2 + a^2 \\ &= 11a^2 \end{aligned}$$

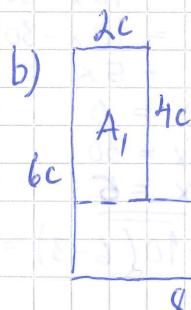
$$\boxed{3a} \quad \boxed{a} + \boxed{a} + \boxed{a}$$

Vi får samma area på sätt  $\textcircled{1}$  och sätt  $\textcircled{2}$ .  $A = 11a^2$

31

$$\text{a) } \boxed{x} \quad \boxed{x} \quad \boxed{A} \quad 2x = \boxed{A_1} \quad 3x \quad \boxed{A_2} \quad x$$

$$A = A_1 - A_2 = 3x \cdot 2x - x \cdot x = 6x^2 - x^2 = \underline{\underline{5x^2}}$$



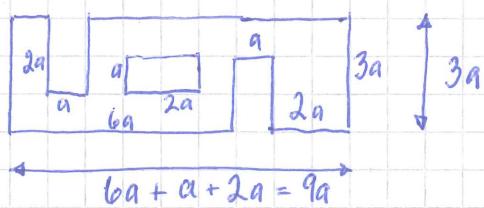
$$A = A_1 + A_2$$

$$\begin{aligned} &= 2c \cdot 4c + 8c \cdot 2c \\ &= 8c^2 + 16c^2 \\ &= \underline{\underline{24c^2}} \end{aligned}$$

## AREAUTTRYCK

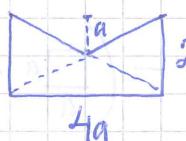
32

a)



$$\begin{aligned}
 A &= 9a \cdot 3a - a \cdot 2a - a \cdot 2a - a \cdot 2a \\
 &= 27a^2 - 2a^2 - 2a^2 - 2a^2 \\
 &= 21a^2
 \end{aligned}$$

b)



$$\begin{aligned}
 A &= 4a \cdot 2a - \frac{4a \cdot a}{2} \\
 &= 8a^2 - 2a^2 \\
 &= \underline{\underline{6a^2}}
 \end{aligned}$$

33

a)



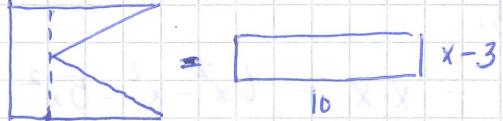
$$2(x+2) = 2x \cdot 1 + x \cdot 1$$

$$2x + 4 = 2x + x$$

$$\begin{aligned}
 3x &= 2x + 4 && \parallel -2x \\
 x &= 4
 \end{aligned}$$

$$A = 2(x+2) = 2(4+2) = \underline{\underline{12}}$$

b)



$$2 \cdot x + 6 \cdot 0,5x = 10(x-3)$$

$$2x + 3x = 10x - 30$$

$$5x = 10x - 30$$

$$(10x - 30) = 5x$$

$$5x - 30 = 0$$

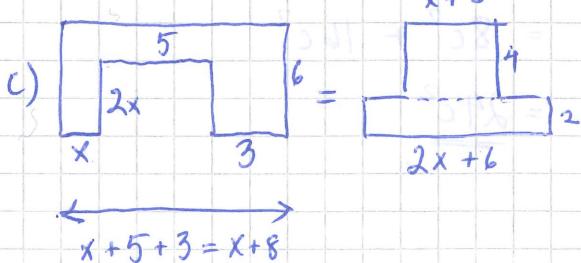
$$5x = 30$$

$$\underline{x = 6}$$

$$\begin{aligned}
 &\parallel -5x \\
 &5x = 10x - 30 \\
 &10x - 30 = 0 \\
 &10x = 30 \\
 &\underline{\underline{x = 6}}
 \end{aligned}$$

$$A = 10(x-3) = \underline{\underline{10(6-3)}} = \underline{\underline{30}}$$

c)



$$6(x+8) - 5 \cdot 2x = 4(x+3) + 2(2x+6)$$

$$6x + 48 - 10x = 4x + 12 + 4x + 12$$

$$-4x + 48 = \underline{\underline{8x + 24}}$$

$$48 = 12x + 24$$

$$24 = 12x$$

$$\underline{\underline{x = 2}}$$

$$A = 8x + 24 = 8 \cdot 2 + 24 = \underline{\underline{40}}$$