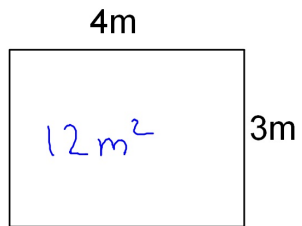
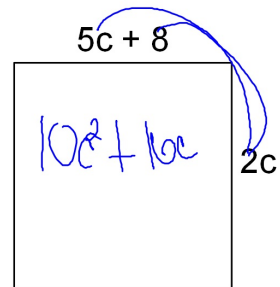


Find the area of each rectangle

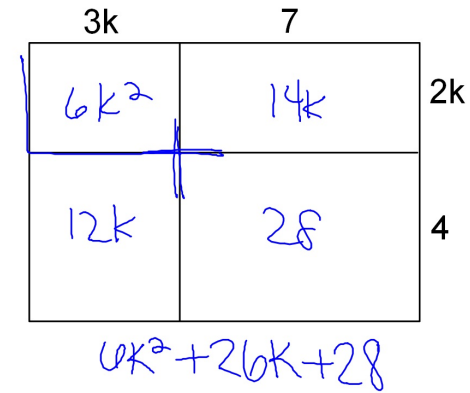
1.



2.



Find the total area.



Sec 9-3: Multiplying Binomials

Expand: $(2a + 7)(a - 5)$

Using the Distributive Property

$$(2a + 7)(a - 5)$$

$$2a(a - 5) + 7(a - 5)$$

$$2a^2 - 10a + 7a - 35$$

$$2a^2 - 3a - 35$$

Using the FOIL Method

$$(2a + 7)(a - 5) = 2a^2 - 3a - 35$$

$$\begin{array}{cccc} 2a^2 & + & -10a & + & 7a & + & -35 \\ \hline \text{F} & & \text{O} & & \text{I} & & \text{L} \\ (2a + 7)(a - 5) & & (2a + 7)(a - 5) & & (2a + 7)(a - 5) & & (2a + 7)(a - 5) \end{array}$$

Mult the First in each parentheses Mult the Outer two terms Mult the Inner two terms Mult the Last in each parentheses

Using the Vertical Method

$$(2a + 7)(a - 5)$$

$$2a + 7$$

$$\begin{array}{r} \times \quad a - 5 \\ \hline -10a - 35 \\ 2a^2 + 7a \\ \hline 2a^2 - 3a - 35 \end{array}$$

Using the Box Method (Area Method)

$$(2a + 7)(a - 5)$$

	2a	+7	
	2a ²	+7a	a
	-10a	-35	-5

Combine like terms to get:

$$2a^2 - 3a - 35$$

Expand each. Write your answer in Standard Form.

1. $(w - 8)(w - 4)$

$$w^2 - 12w + 32$$

2. $(5b - 2)(3b + 9)$

$$15b^2 + 45b - 6b - 18$$

$$15b^2 + 39b - 18$$

3. $(k + 5)^2$

$$(k+5) \cdot (k+5) = k^2 + 10k + 25$$

Expand. Write your answer in Standard Form.

1. $(d + 1)(d - 4)$

	d	$+1$	
d	d^2	d	
-4	$-4d$	-4	

$= d^2 - 3d - 4$

2. $(g - 2)(g - 9)$

$$g^2 - 11g + 18$$