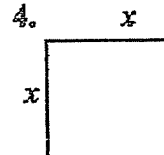
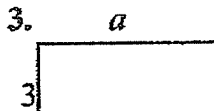
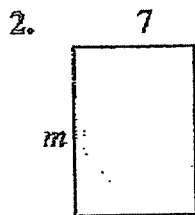
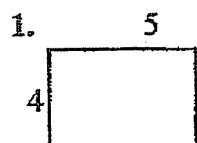


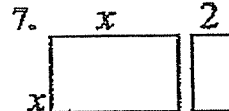
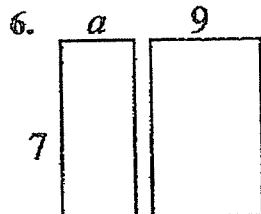
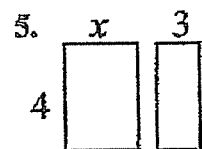
Distributive Property Using Area

NAME _____

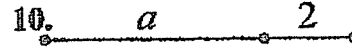
Write the expression that represents the area of each rectangle.



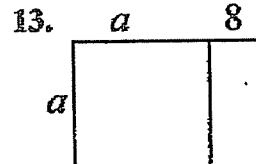
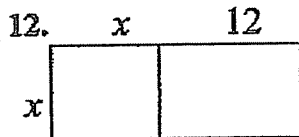
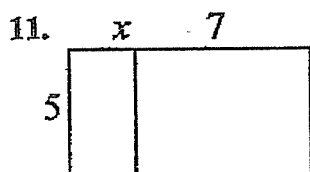
Find the area of each box in the pair.



Write the expression that represents the total length of each segment.



Write the area of each rectangle as the product of *length* \times *width* and also as a sum of the areas of each box.



AREA AS PRODUCT	AREA AS SUM
$5(x+7)$	$5x+35$

AREA AS PRODUCT	AREA AS SUM

AREA AS PRODUCT	AREA AS SUM

This process of writing these products as a sum uses the distributive property.

Use the distributive property to re-write each expression as a sum. You may want to draw a rectangle on a separate page to follow the technique above.

14. $4(x+7) =$ _____

15. $7(x-3) =$ _____

16. $-2(x+4) =$ _____

17. $x(x+9) =$ _____

18. $a(a-1) =$ _____

19. $3m(m+2) =$ _____

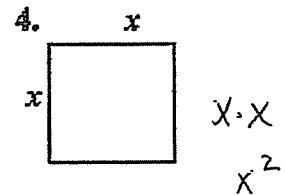
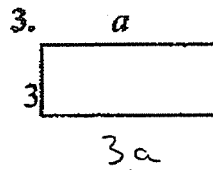
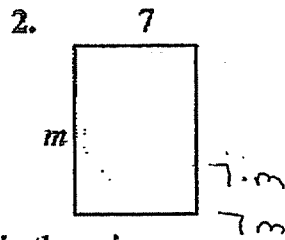
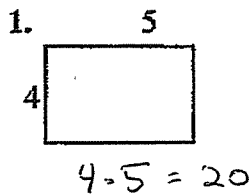
20. $-4(a-4) =$ _____

21. $a(a-12) =$ _____

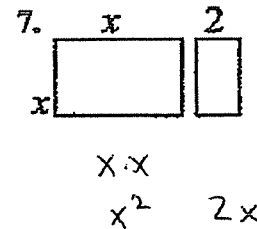
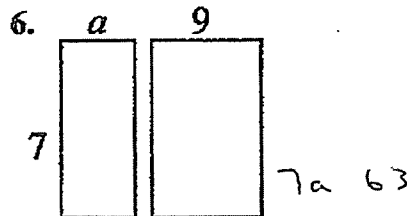
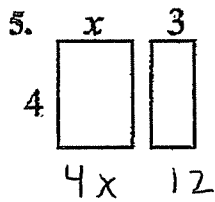
Distributive Property Using Area

NAME _____

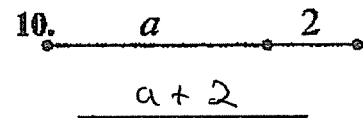
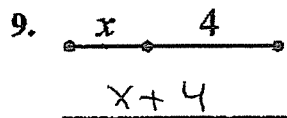
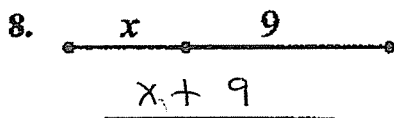
Write the expression that represents the area of each rectangle. $A = lw$



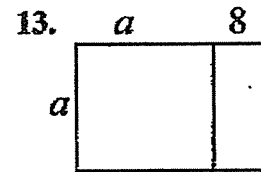
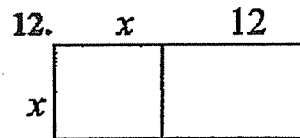
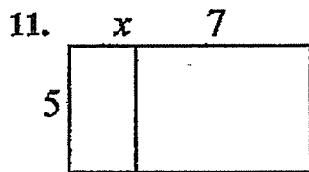
Find the area of each box in the pair.



Write the expression that represents the total length of each segment.



Write the area of each rectangle as the product of *length* \times *width* and also as a sum of the areas of each box.



AREA AS PRODUCT	AREA AS SUM
$5(x+7)$	$5x+35$

AREA AS PRODUCT	AREA AS SUM
$x(x+12)$	x^2+12x

AREA AS PRODUCT	AREA AS SUM
$a(a+8)$	a^2+8a

This process of writing these products as a sum uses the **distributive property**.

Use the distributive property to re-write each expression as a sum. You may want to draw a rectangle on a separate page to follow the technique above.

14. $4(x+7) = 4x + 28$

16. $-2(x+4) = -2x - 8$

18. $a(a-1) = a^2 - a$

20. $-4(a-4) = -4a + 16$

15. $7(x-3) = 7x - 21$

17. $x(x+9) = x^2 + 9x$

19. $3m(m+2) = 3m^2 + 6m$

21. $a(a-12) = a^2 - 12a$