Multiplication Flashcards: Activity #1

1. Utilize index cards and a pencil.
2. On each side of the index card write one multiplication fact.
3. Write the answer of the fact on the opposite side of the card in the top right hand corner.

Distributive Property: Activity #2

1. Roll the die. Record that number in the star. Roll the die a second time. Record that number in the triangle. If you roll a ONE on either roll, choose a number between 7 and 10 to put in its place.
2. Create a PRODUCT to represent the AREA of the entire figure.
3. Simplify using the DISTRIBUTIVE PROPERTY, resulting in a sum.
4. Record your answer in the sheet provided.

Multiplication Chart

x	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

k Distributive Property

Record 20 expressions for 20 PRIDE points - NAME_____

Ex. $3(k + 5)$ $3(k) + 3(5)$ $3k + 15$	Ex. $2(k + 4)$ $2(k) + 2(4)$ $2k + 8$
1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

x Distributive Property

Record 20 expressions for 20 PRIDE points - NAME_____

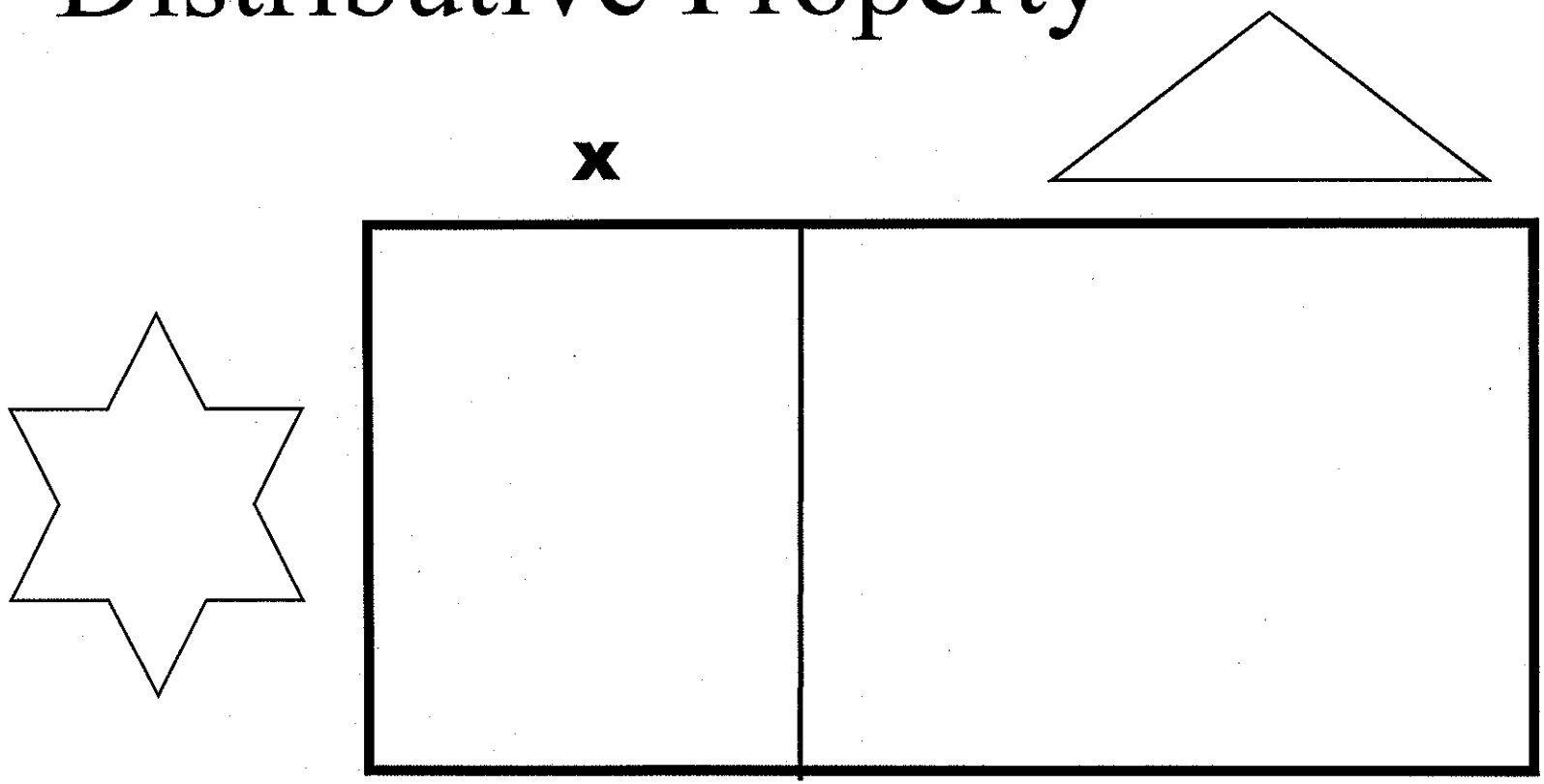
Ex. $y(x + p)$ $y(x) + y(p)$ $xy + py$ (each term should be written in alphabetical order)	$w(x+b)$ $w(x) + w(b)$ $wx + bw$
1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

Distributive Property

Record 20 expressions for 20 PRIDE points - NAME_____

Ex. $3(x + y)$ $3(x) + 3(y)$ $3x + 3y$	Ex. $2(x + b)$ $2(x) + 2(b)$ $2x + 2b$
1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

Distributive Property



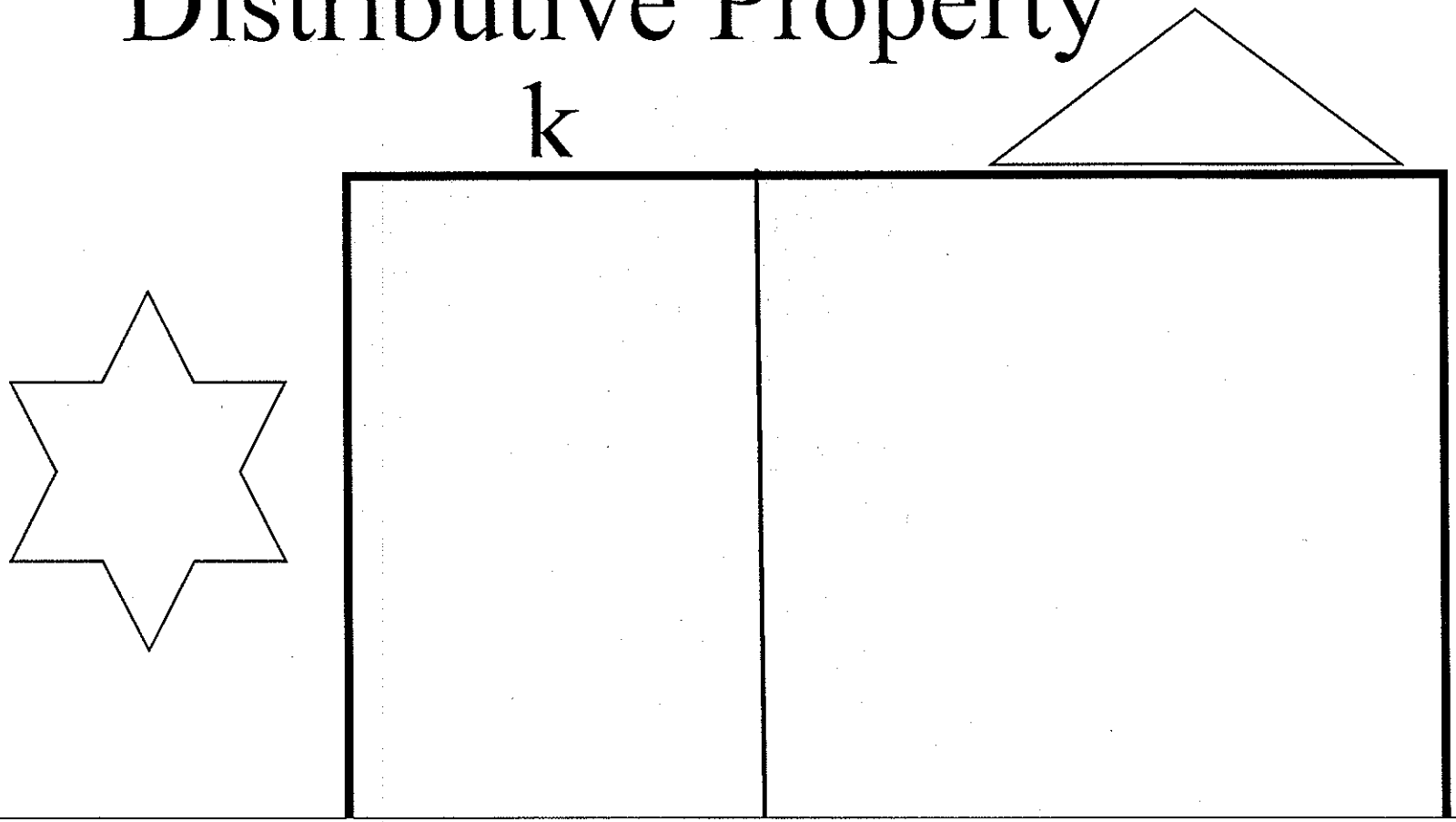
Directions: If you roll a "1" on the first step, pick a number between "7" and "10" to use in its place.

1. Roll the dice. Write corresponding number in the star.
2. Roll the dice again. Write the corresponding letter in the triangle.
3. Now, use the distributive property to write an expression.

1 = y
2 = m
3 = p
4 = w
5 = c
6 = b

Distributive Property

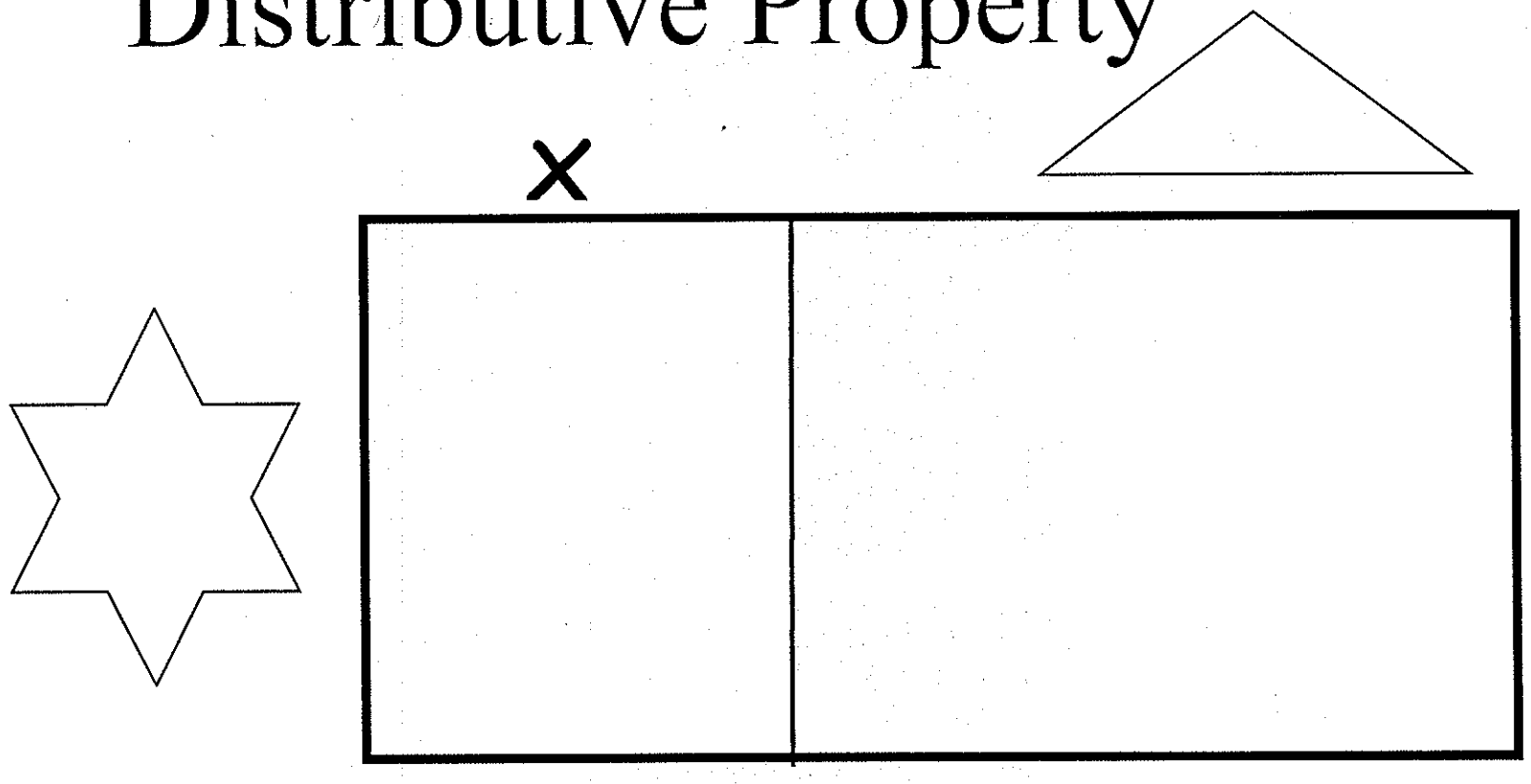
k



Directions: If you roll a "1", pick a number between 7 and 10 to use in its place.

1. Roll the dice. Write the number in the star.
2. Roll the dice again. Write this number in the triangle.
3. Now, use the distributive property to write an expression.

Distributive Property



Directions:

1. Roll the dice. Write corresponding letter in the star.
2. Roll the dice again. Write the corresponding letter in the triangle.
3. Now, use the distributive property to write an expression.

1 = y

2 = m

3 = p

4 = w

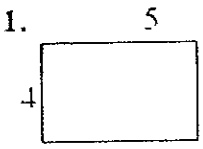
5 = c

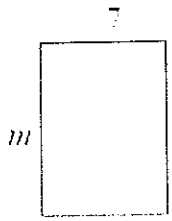
6 = b

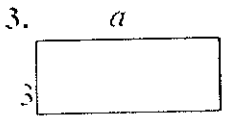
Distributive Property Using Area

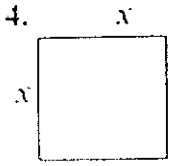
NAME _____

Write the expression that represents the area of each rectangle. Area = length x width

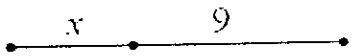
1. 

2. 

3. 

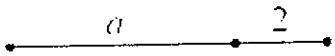
4. 

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



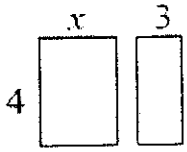
5. _____

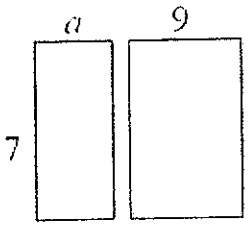
6. _____

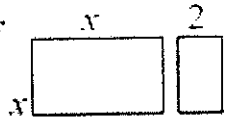


7. _____

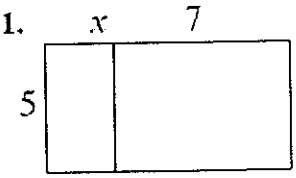
Find the area of each box in the pair.

8. 

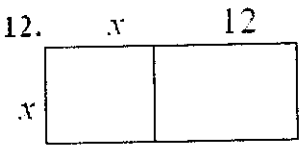
9. 

10. 

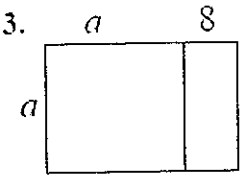
Write the area of each rectangle as the product of *length* × *width* and also as a sum of the areas of each box.

11. 

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

12. 

AREA AS PRODUCT	AREA AS SUM

13. 

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

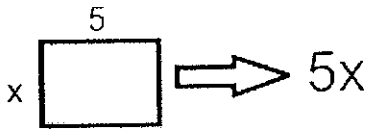
20. $-4(a-4)=$_____

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

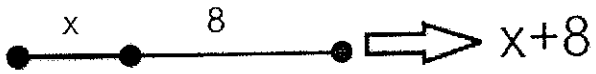
Area Representation of the Distributive Property

Area = length x width

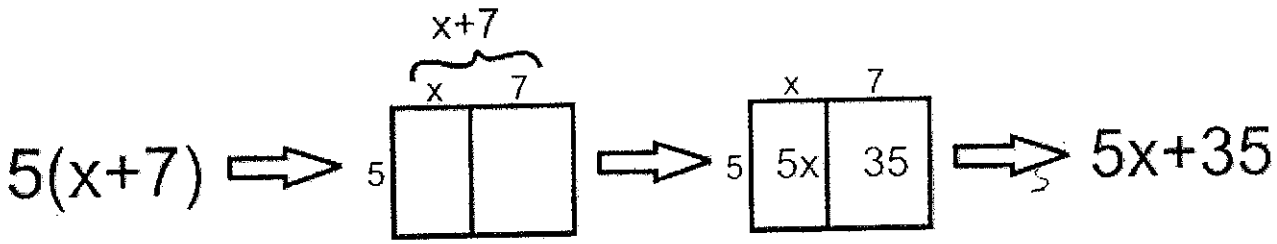
The first section introduces students to the idea of writing the area of a rectangle as an expression of the length × width, even when one or more dimensions may be represented by a variable.



The next section aquaints students with the thought of writing the length of a segment consisting of two parts as a *sum*.



The key section is next, having students represent the area of each rectangle *two ways* to distribute the common factor among all parts of the expression in parentheses.



ILLUMINATIONS
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