Math 2 Classwork 24

Warm Up

1 **Multiplication table.** Solve as many as you can in **3 minutes.**

10 × 10 =	10 × 11 =	4 × 11 =
6 × 11 =	4 × 70 =	60 × 6 =
20 × 11 =	6 × 7 =	3 × 7 =
6 × 9 =	7 × 8 =	70 × 60 =
50 × 70 =	70 × 8 =	70 × 6 =
80 × 100 =	8 × 8 =	40 × 7 =
40 × 60 =	8 × 9 =	9 × 9 =

2 Compare using >, <, or =.

$254 - a \square 204 - a$	$m - 63 \square m - 36$	$c + d \square d + c$
$b - 287 \square b - 56$	$310 + n \square 305 + n$	$440 - k \square 540 -$

3 Without calculations, write all expressions in the descending order (from the largest to smallest):

12 × 123, 123 × 14, 123 ×17, 18 × 123, 123 × 15, 13 × 123

4

1m =10 dm = 100 cm $1\ m^2 = 100\ dm^2 = 10{,}000$

$2\ cm^2 + 5\ cm^2 =$ _____ cm^2	$3\ dm^2 - 2\ dm^2 =$ _____ dm^2
$15\ cm^2 - 7\ cm^2 =$ _____ cm^2	$11\ dm^2 + 7\ dm^2 =$ _____ dm^2
$500\ cm^2 + 1\ dm^2 =$ _____ cm^2	$500\ cm^2 + 1\ dm^2 =$ _____ dm^2

Homework Review

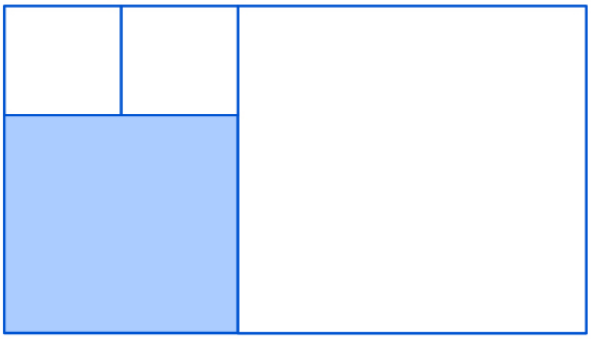
5 Insert missing numbers:

15 + (5 ×…) = 25	15 + (5 ×…) = 55	15 + (5 ×…) = 40
15 + (5 ×…) = 60	15 + (5 ×…) = 70	15 + (5 ×…) = 75

6 Rectangle is divided into 4 squares. Find a perimeter and an area of the rectangle if one side of the shaded square is 8 cm.

P = _____

A = _____



New Material I

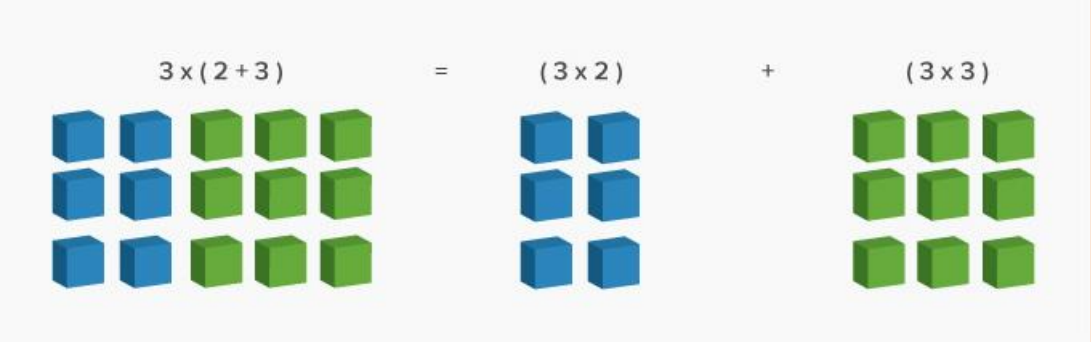
The distributive property is one of the most commonly used properties in mathematics.
When you distribute something, you are dividing it into parts. For example, the distributive property helps simplify complex problems in math because it breaks down expressions into the sum or difference of two numbers.

For expressions in the form of $a \times (b + c)$, the distributive property shows us how to solve them by:

- Multiplying the number immediately outside parentheses with those insides
- Adding the products together

$$a(b+c) = ab + ac$$

According to the distributive property, multiplying the sum of two or more addends by a number will result in multiplying each addend individually by the number and then adding the products together.
An example: $3 \times (2 + 3) = 3 \times 2 + 3 \times 3 = 6 + 9 = 15$ We will get the same answer if we 3×5



7 Re-write the expressions, using the distributive property:

3(z + 6) =_____

2(8 – y) =_____

4(a + 3) =_____

5(4 – q) =_____

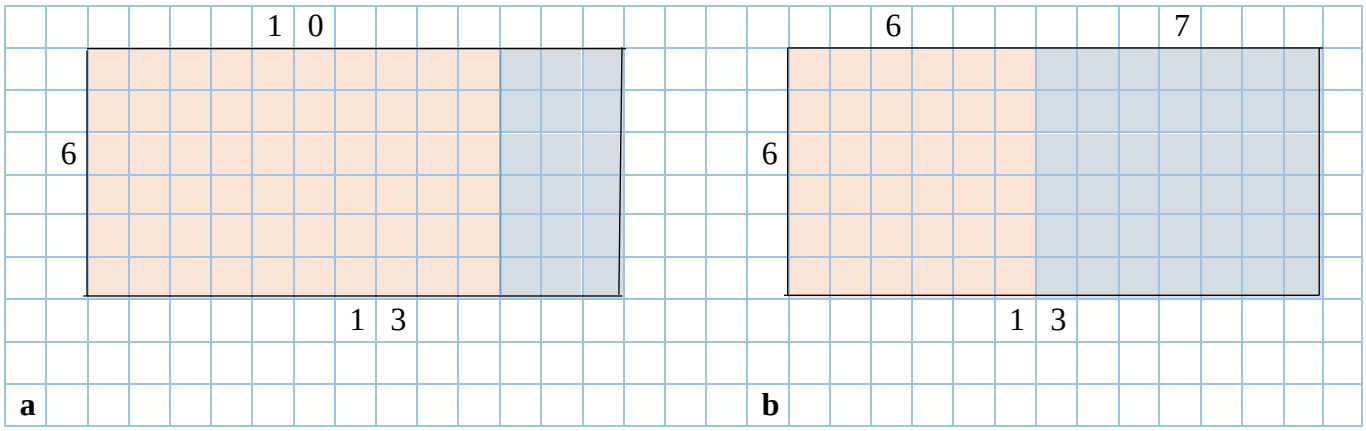
5(2z + 9) =_____

2(8 – 2y) =_____

4(2a + 6) =_____

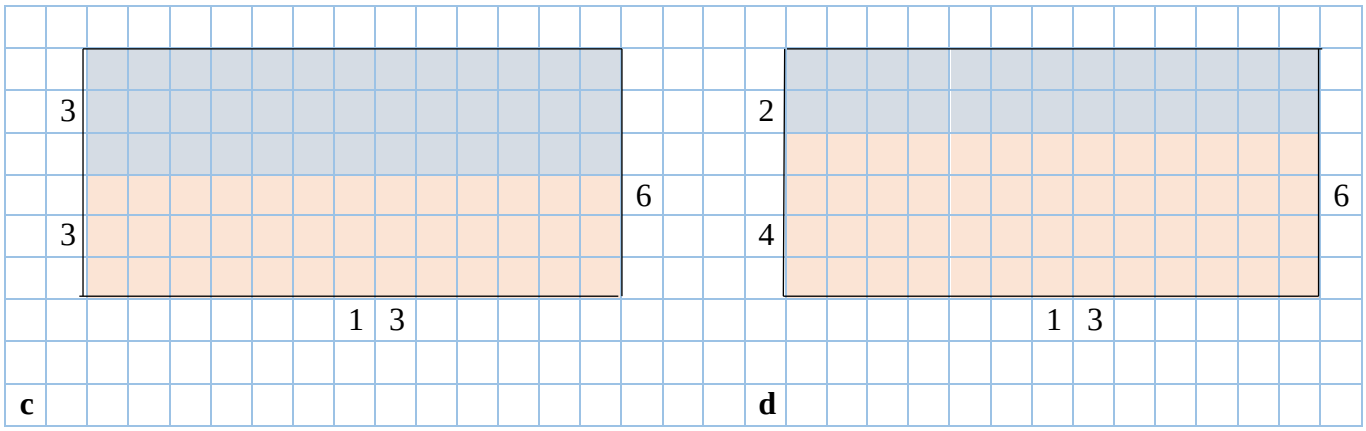
8 **Using the drawing to understand the Distributive Property:**

Calculate 6 × 13 using the distributive property of multiplication. Consider 4 different ways:



a) 6 × 13 = 6 × (10 + 3) = 6 × 10 + 6 × 3 = 78

b) 6 × 13 = 6 × (6 + 7) = 6 × 6 + 6 × 7 = 78



c) 6 × 13 =

d) 6 × 13 =

Q: Did you get the same answer? Why? _____

REVIEW

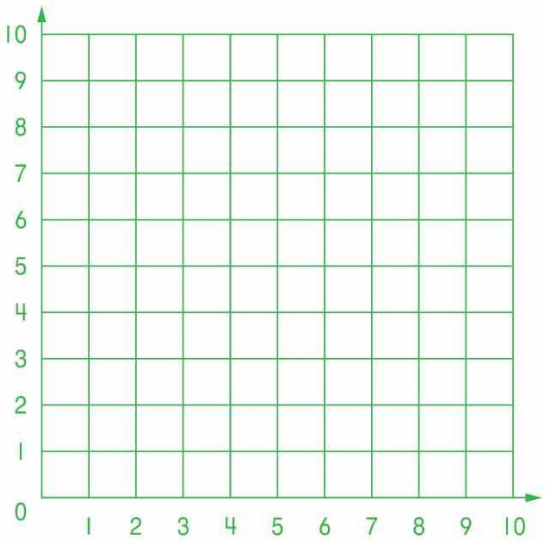
9

Two frogs – Ben and Dina decided to visit each other.

Ben started from point A (2, 8), then jumped 3 squares to the right to point B. Then he jumped 3 squares down and ended up at point C. What are the coordinates of points B and C?

Dina started at point K (7, 1), then she jumped 4 squares up to point L, then she jumped 4 squares to the left to point M. What are the coordinates of points L and M?

How many squares are between points C and M? What jumps Ben and Dina should make to meet each other? Mark the point of meeting as a point O and write its coordinates.



10

Calculate:

38 × 7 = 107 × 7 = 611 × 7 =

11

Open the parentheses and calculate where possible:

123 – (12 + 15) = _____ 218 – (*b* – *c*) =_____

n + (*a* + *b* – *c*) =_____ 145 – (*s* + *w* – *18*) =_____

6 (*45* – *17*) = _____ 7(80 – a) =_____

n × (*a* × *b*) =_____ 145 – (*s* + *w* – *18*) =_____