

1 Compare the expressions without calculating its values. Use $<$, $>$, $=$

$$5 \times 6 - 5 \quad \underline{\hspace{1cm}} \quad 5 \times 5 + 5$$

$$48 + 20 \quad \underline{\hspace{1cm}} \quad 4 \times 5 + 50$$

$$7 \times 6 + 7 \quad \underline{\hspace{1cm}} \quad 6 \times 7 + 6$$

$$24 + 32 \quad \underline{\hspace{1cm}} \quad (32 - 24) \times 7$$

2 Calculate:

$$20 \times 30 =$$

$$50 \times 100 =$$

$$15 \times 100 =$$

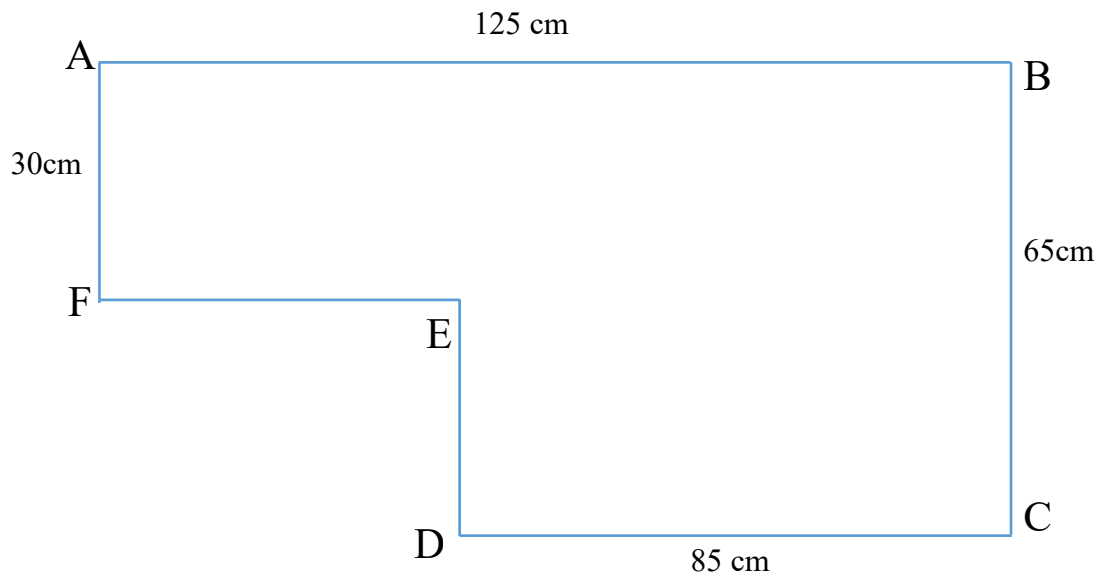
$$25 \times 10 =$$

$$200 \times 2 =$$

$$40 \times 10 =$$

3 At the school's art exhibition 40 drawings were presented. Out of them 8 drawings were made in pencil, and the rest were made with paints. How many times more drawings are done with paints than with a pencil?

4 Find the perimeter of the following figure, if you know some of the sides:



5

Calculate:

a) $9\text{dm } 1\text{cm} - 3\text{dm } 9\text{cm} - 2\text{dm } 7\text{cm} =$ _____

b) $4\text{dm } 2\text{cm} + 5\text{m } 8\text{dm} - 7\text{m } 6\text{dm} =$ _____

6

Draw a four-sided polygon that has right angles at the 2 bottom corners, an angle less than 90° at the upper left corner, and an angle greater than 90° in the upper right corner.

7

Calculate:

$548 + 0 =$

$0 + 491 =$

$864 - 0 =$

$346 - 346 =$

$0 + 0 =$

$0 - 0 =$

$111 \times 0 =$

$2 \times 0 =$

$0 \times 39 =$

$20 \times 30 =$

$15 \times 100 =$

$200 \times 2 =$

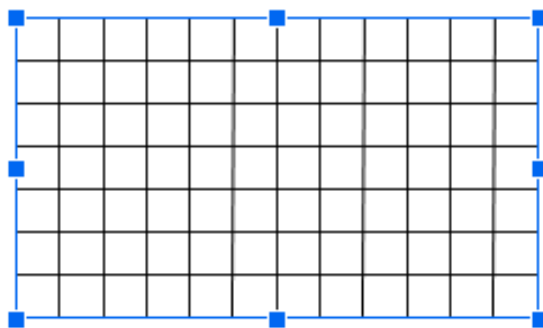
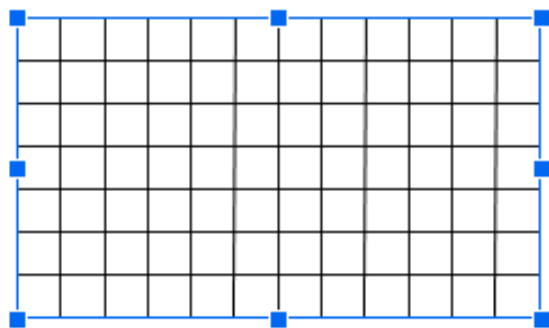
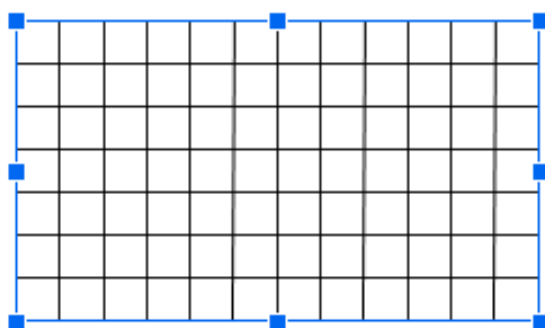
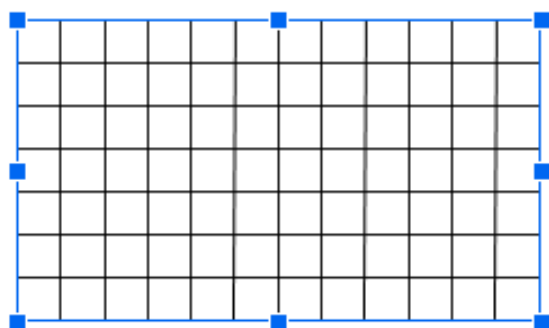
$50 \times 100 =$

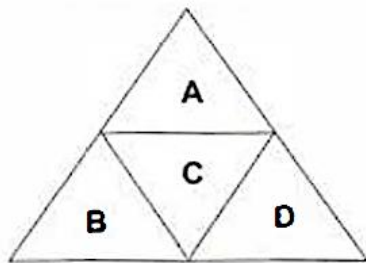
$25 \times 10 =$

$40 \times 10 =$

8

Perimeter of quadrilateral is 16 cm (assume that each cell is 1cm). Draw several different quadrilaterals with the same perimeter – 16 cm.



Method: Systematic counting*Example: How many triangles are there in the figure below?*

Step 1. Count only triangles, which are formed by 1-unit triangle: A, B, C and D (total: 4)

Step 2. Count only triangles, which are formed by 2-unit triangles: NONE

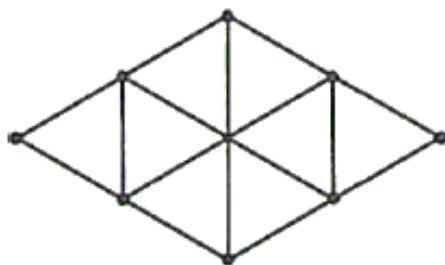
Step 3. Count only triangles, which are formed by 3-units triangles: NONE

Step 4. Count only triangles, which are formed by 4-units triangles: A+B+C+D (total: 1)

Total: $4 + 0 + 0 + 1 = 5$

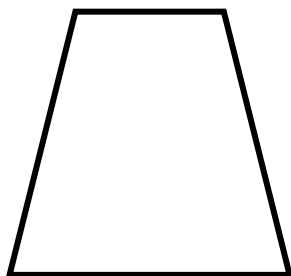
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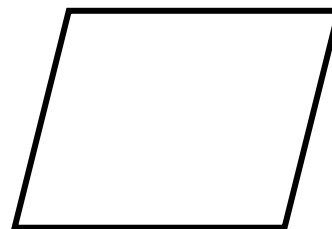
How many triangles are there in the figure below (use a systematic counting method)?



10

Use a protractor to measure in degrees each of the angles in the shapes below:





11

Cora and Cecilia each use chalk to make their own number patterns on the sidewalk. Cora puts 0 in her first box and decides that she will add 3 every time to get the next number. Cecilia puts 0 in her first box and decides that she will add 9 every time to get the next number.

Cora:

0	3								
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Cecilia:

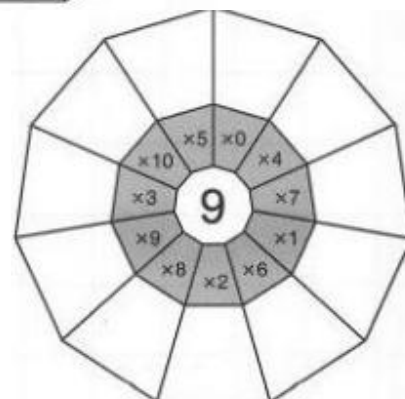
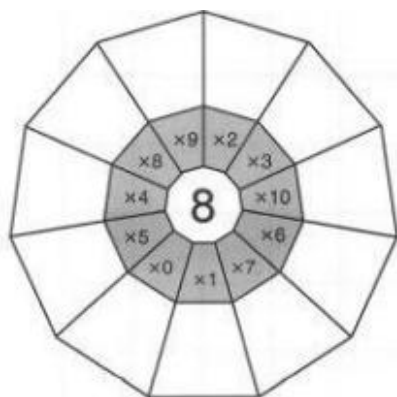
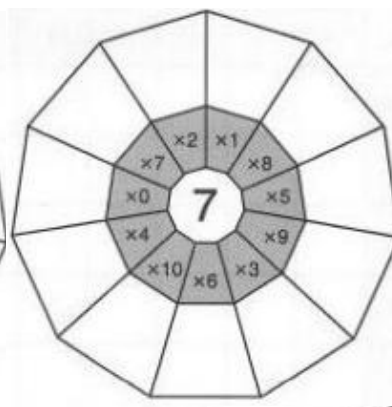
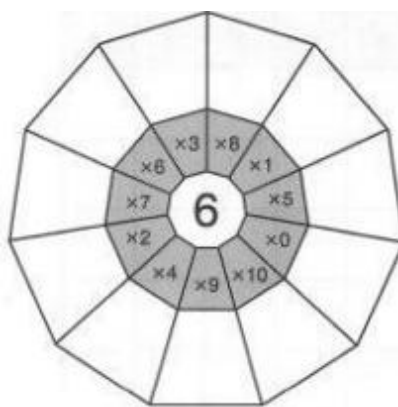
0	9								
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- Complete each girl's sidewalk pattern.
- How many times greater is Cecilia's number in the 5th box be than Cora's number in the 5th box? _____
- What about the numbers in the 8th box? _____
- The 10th box? _____
- What pattern do you notice in your answers for part b? Why do you think that pattern exists?

- If Cora and Cecilia kept their sidewalk patterns going, what number will be in Cora's box when Cecilia's corresponding box shows 108? _____

12

Complete the multiplication facts in the wheels below. Some answers have already been filled in.



- 13** The numbers 0 through 10 each appears only once in the shaded row and once in the shaded column. Fill in all missed numbers in the table.

×											
			9			0					
							16				
		25							30		
				4						16	
								100			
	49										
			0								
					1						
				16							64
						81					

- 14** We know, that
 $9 + 9 + 9 + 9 = 4 \times 9$ and
 $4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = 8 \times 4$ and
 $3 + 3 + 3 + 5 + 5 = 3 \times 3 + 5 \times 2$

Simplify:

- a) $n + n + n + n + n =$
b) $a + a + a + a + b + b + b =$
c) $c + c + d + c + d + d =$

- 15** We know, that $7 - 7 = 0$, $11 - 11 = 0$.
Simplify:

$$n - n =$$

$$a - a =$$

$$c - d - c + d =$$

- 16** We know, that
 $6 + 5 - 5 = 6$ and
 $9 + 3 - 3 = 9$

Simplify:

$$n + 5 - 5 =$$

$$16 + n - n =$$

$$a + 10 + a =$$