Math 4. Homework 4.

1. Compute using the most convenient way (use the distributive law - ab + ac = a(b+c)

$23 \times 15 + 15 \times 77 =$

$79 \times 21 - 69 \times 21 =$

$340 \times 7 + 16 \times 70 =$

$250 \times 61 - 25 \times 390 =$

$67 \times 58 + 33 \times 58 =$

2. Open parenthesis using the distributive property of multiplication:
   a(b+c) = ab + ac

a. $a(x + y) =$

b. $2 \times (a + b) =$

c. $8(7y - 3) =$

d. $(a + 2) \times 5 =$

3. Solve the equations

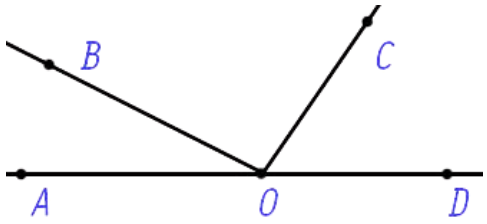
$5\ (x + 25) = 10\ (x + 10)$

$28 - 4x = 50 + 3x - 45$

4. The remainder of 1932 ÷ 17 is 11, the remainder of 261 ÷ 17 is 6. Is 2193 = 1932 + 261 divisible by 17? Can you tell without calculating and dividing?

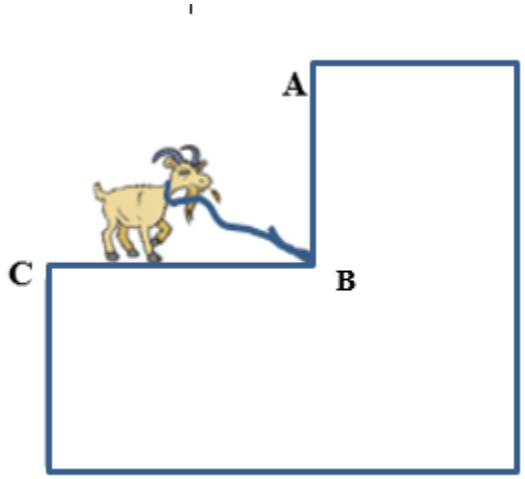
5. *Right angle is divided into 3 angles by 2 rays. One of this angles by 20° more than the other and by 20° less the third one. What are the measures of these 3 angles?

6. On the picture below ∠BOD = 152°, ∠COD = 55°, angle ∠AOD is a straight angle. Find the measures of all other angles on the picture.

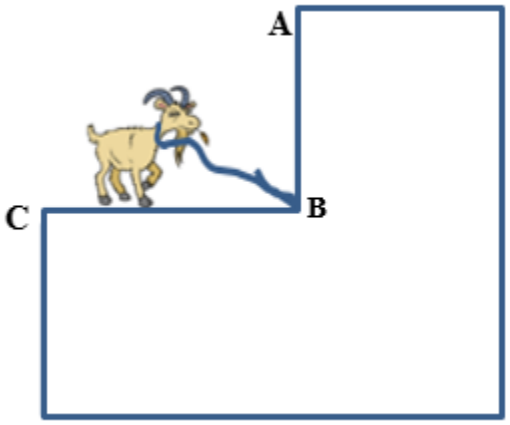


9. A goat is tied to a stake in the corner of a building with a 5-yard-long rope. What shape it will graze if the lengths of the walls are as follows:

AB =6 yards and BC = 7 yards



2. AB =4 yards and BC = 5 yards



10. Two circles touch at a single point (tangent circles). The radius of the first circle is 10 cm, the radius of the second circle is 6 cm. What is the distance between the centers of these circles?