school nova™

Math 3   Homework 11

1

*A **triangle is** a closed shape with three straight sides that meet at three vertices. It is a polygon.*
Review the classification of the triangles:

Types of triangles:

By sides:
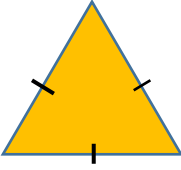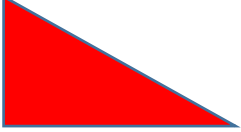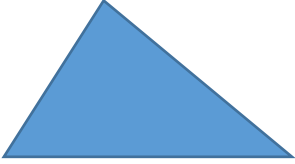a) **Scalene triangle** – no equal angles and no equal sides
b) **Isosceles triangle** – 2 equal sides and 2 equal angles
c) **Equilateral triangle** – 3 equal sides and 3 equal angles

By angles:
a) **Right triangle**– has a right angle
b) **Obtuse triangle** – has an angle that larger than a right angle
c) **Acute triangle** – all angles are smaller than a right angle

2

Determine what triangle it is by it's sides and by it's angles (USE THE RIGHT ANGLE TEMPLATE OR PROTRACTOR):

Picture of a triangle	Type of the triangle
	_____ _____
	_____ _____
	_____ _____
	_____ _____
	_____ _____

3 Using a ruler and a protractor, draw the following shapes:

a) A shape with 3 line segments that is not a triangle.

b) A right isosceles triangle $\triangle ABC$

c) an obtuse isosceles triangle $\triangle PQR$

4 Compare expressions using $<, >, =$

$5 \times 6 - 5$ ____ $5 \times 5 + 5$ $7 \times 6 + 7$ ____ $6 \times 7 + 6$

$48 + 20$ ____ $4 \times 5 + 50$ $24 + 32$ ____ $(32 - 24) \times 7$

5 While helping their mother to unload a dishwasher, Victoria put 5 plates on each of 3 shelves of the kitchen cabinet and Julia put 4 plates on the each of 3 shelves. How many plates did both of them put in the kitchen cabinet?

_____

_____

6 Calculate:(write in the vertical form) (USE THE TUTORIAL FROM THE CLASSWORK11)

a) $18 \times 3 =$ b) $77 \times 5 =$ c) $64 \times 7 =$

7

Find the greatest missing number so that an inequality will still be correct.

$6 \times$ ____ < 45 $7 \times$ ____ $< 40 - 5$ $27 + 8 > 6 \times$ ____

____ $\times 9 < 32$ ____ $\times 5 < 4 \times 7$ $8 \times$ ____ $< 20 + 27$

8

Find the missing numbers to make an equality correct:

$15 \times 2 = 5 \times$ ____ $12 \times$ ____ $=$ ____ $\times 24$ $14 \times 4 = 8 \times$ ____

$15 \times 4 = 10 \times$ ____ $25 \times$ ____ $= 10 \times 10$ $25 \times 3 = 5 \times$ ____

9

Find ONLY the last digit of the product:

45321×423 _____ 87325×938162 _____ 93824×156832 ____

73815×38915 ____ 6783×982713 _____ 49812×390 _____

10

A school has planted 12 trees along one side of the road from one end to the other. One tree was planted every 6 meters. How long is the road?

_____

11

Solve the problems:

a) There are *a* apples in a box. Each box of apples costs *$5*.
What is the total price of 5 boxes? _____
How many apples are in 5 boxes? _____

b) James's mother bought 3 dresses. Each dress costs *$c*.
How much money did she spend for 3 dresses? _____
How much money she would spend for *n* dresses? _____

c) Tom's dad bought 2 watermelons and 6 times as many apples. Each watermelon costs $4 and each apple costs $2.
 If he had a $50 bill, how much money did he have left after his purchase?

_____

_____

d) Kate wants to give candies to all her friends who come to the party.
She wants to put 5 candies in each bag. Each child gets two bags of candies.
How many candies will she need for 10 guests? _____
How many bags will she need for 10 guests? _____

12 Open parentheses and simplify the expressions:

$300 - (a + b) =$ _____

$200 - (a + 2) + (b - 100) =$ _____

$29 - (5 + b) =$ _____

$30 - (5 + a) + (a + 15) =$ _____

$70 - (b - a) =$ _____

$72 - (2 - k) - (c - d) =$ _____

13 Determine order of operation in each expression and calculate the values:

$18 + 12 - 8 - 6 =$ _____ $32 - 10 + 6 - 3 =$ _____

$18 + 12 - (8 - 6) =$ _____ $32 - (10 + 6) - 3 =$ _____

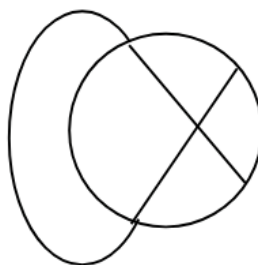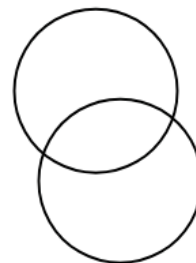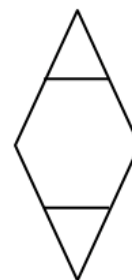$18 + (12 - 8) - 6 =$ _____ $32 - 10 + (6 - 3) =$ _____

14 Try to trace every line in each diagram without lifting a pencil or tracing the same line twice. Is it possible to do for all of those five diagrams?

_____   _____   _____   _____   _____
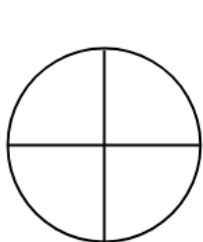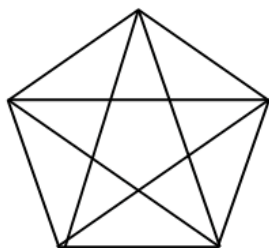
15 Write down an expression for each statement:

1) There were m pencils in one box, and there are k pencils in another box.

   How many pencils are in two boxes together? _____

2) There were *d* pencils in one box, and we took away *p* pencils from the box.

   How many pencils are in the box now? _____

3) There are *f* pencils in one box and *5 less* pencils in another box.
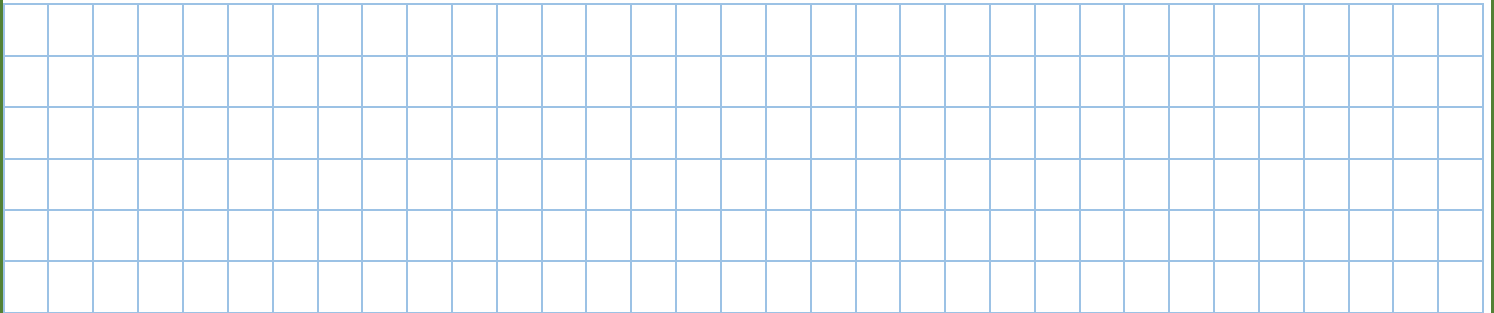
   How many pencils are in both boxes? _____

4) There were *n* pencils in one box and *t* pencils in another box.

   We took away *b* pencils from the second box.

   How many pencils are in both boxes now? _____

16 Solve equations and check you answers:

a) $(15 + 45) - x = 25$ b) $x - (101 - 11) = 110$

17 Please complete the multiplication exercise.

1) Put the timer on for three minutes and solve as many as you can!

2) Take a color pencil or pen and complete the rest.