## 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: $\quad$ 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

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 $\triangle \mathrm{ABC}$
c) an obtuse isosceles triangle $\triangle \mathrm{PQR}$

4
Compare expressions using <, >, =
$5 \times 6-5 \ldots 5 \times 5+5$
$7 \times 6+7$ $\qquad$ $6 \times 7+6$
$48+20$ $\qquad$ $4 \times 5+50$
$24+32$ $\qquad$ $(32-24) \times 7$

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?
$\qquad$
$\qquad$

6
Calculate:(write in the vertical form) (USE THE TUTORIAL FROM THE CLASSWORK11 PAGE5)
a) $18 \times 3=$
b) $77 \times 5=$
c) $64 \times 7=$

Find the greatest missing number so that an inequality will still be correct.
$6 \times$ $\qquad$ < 45
$\qquad$ $\times 9<32$
$7 \times$ $\qquad$ <40-5 $27+8>6 \times$ $\qquad$
$\qquad$ $\times 5<4 \times 7$
$8 \times$ $\qquad$ $<20+27$

8
Find the missing numbers to make an equality correct:
$15 \times 2=5 \times$ $\qquad$

$$
=
$$

$\qquad$ $\times 24$
$14 \times 4=8 \times$ $\qquad$
$15 \times 4=10 \times$ $\qquad$
$25 \times$ $\qquad$ $=10 \times 10$
$25 \times 3=5 \times$ $\qquad$

9 Find ONLY the last digit of the product:
$45321 \times 423$ $\qquad$
$87325 \times 938162$ $\qquad$ $93824 \times 156832$ $\qquad$
$73815 \times 38915$ $\qquad$ $6783 \times 982713$ $\qquad$ $49812 \times 390$ $\qquad$

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? $\qquad$
How many apples are in 5 boxes? $\qquad$
b) James's mother bought 3 dresses. Each dress costs $\$ c$.

How much money did she spend for 3 dresses? $\qquad$
How much money she would spend for $n$ dresses? $\qquad$
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?

12 Open parentheses and simplify the expressions:
$300-(a+b)=$ $\qquad$
$200-(a+2)+(b-100)=$ $\qquad$
$29-(5+b)=$ $\qquad$
$30-(5+a)+(a+15)=$ $\qquad$
$70-(b-a)=$ $\qquad$
$72-(2-k)-(c-d)=$ $\qquad$

13
Determine order of operation in each expression and calculate the values:
$\qquad$ $32-10+6-3=$ $\qquad$
$18+12-(8-6)=$ $\qquad$ $32-(10+6)-3=$ $\qquad$
$18+(12-8)-6=$ $\qquad$ $32-10+(6-3)=$ $\qquad$

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?


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.
