

### Math 3 Homework 14

Calculate:

a) 
$$999 + 1 =$$

$$199 + 1 =$$

$$79 + 1 =$$

$$629 + 1 =$$

$$1000 - 1 =$$

$$810 - 1 =$$

$$500 - 1 =$$

$$500 - 1 = 1991 - 1 =$$

b) 
$$2000 + 400 + 30 + 1 =$$

$$9000 + 30 + 3 =$$

$$7000 + 20 + 7 =$$

$$1000 + 700 + 20 + 6 =$$

c) Calculate the fastest way (rewrite the expression to show your way of calculation):

$$(303 + 274) + 26 =$$

$$81 + (9 + 27) =$$

$$(437 + 92) - 37 =$$

$$(364 + 415) - 264 =$$

d) Increase the numbers in 10 times: 60, 600, 15, 150, 435

a) Determine order of operations and calculate:

$$800 - 420 - 120 + 40 =$$

$$800 - (420 - 120) + 40$$

$$800 - 420 - (120 + 40)$$

$$800 - 120 + 8 \times 20 =$$

b) Insert parentheses to make the equations correct:

$$32 - 2 \times 6 + 3 = 183$$

$$32 - 2 \times 6 + 3 = 17$$

$$32 - 2 \times 6 + 3 = 23$$

$$32 - 2 \times 6 + 3 = 270$$

a) Put all weights in order from the heaviest to the lightest:

2 kg,

1kg 900g,

250g, 25kg, 2,500g,

2kg 50g

b) Put all lengths in order from the smallest to largest:

3m 3dm,

30dm,

333cm,

3dm 3cm,

303cm



3

2

Report the time you spent: \_\_\_\_\_

4

Let's count angles.

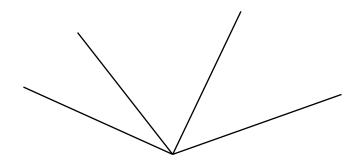
How many angles are on the sketch below? Name all angles using capital letters and

list all angles here:

list only obtuse angles here:

list only acute angles here:

If you are not sure, use the right angle template to confirm your answer:



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What types of angles are formed by the hour hand and the minute hand on the clock face at the following times (right, obtuse, acute, straight) ?

- a) 3 o'clock angle \_\_\_\_\_
- b) 4 o'clock angle \_\_\_\_\_
- c) half past 9 angle \_\_\_\_\_
- 11 o'clock angle \_\_\_\_\_

6

Using the squared piece of paper below, draw a rectangle with a length of 8 square segments and the width of 6 square segments.

Find the perimeter of the rectangle you draw. P = \_\_\_\_\_

With one straight line, divide the rectangle into two identical rectangles.

Find the perimeter of each smaller rectangle.

Consider two different cases.  $P_1 = \underline{\hspace{1cm}}$ 

 $P_2 = \underline{\hspace{1cm}}$ 



### HW 14

## Parallel and Perpendicular lines. Using compass for measuring distances. Long multiplication.

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Construct a line parallel to the line  $A_0A_2$  on the distance of 3cm away from line  $A_0A_2$ . Call it  $B_0B_2$  Reminder:

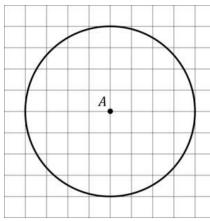
- 1 Use your protractor to draw a line that goes through  $A_0$  and is at 90° to the line  $A_0A_2$ .
- 2. Use a ruler and measure the distance of 3 cm from the point  $A_0$ . Label the point  $B_0$
- 3. Repeat the procedure for the point  $A_2$ .
- 4. Connect points  $B_0$  and  $B_2$  by a straight line.



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A circle with center *A* is drawn on 1cm grid paper as shown below. What is the radius of the circle?

Draw another circle with a radius 2 times less than the radius of the circle on the picture.



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Reminder:

Adjacent angles share a side and a vertex.

Complementary angles have measures that add up to 90 degrees. Supplementary angles have measures that add up to  $180^{\circ}$  degrees.

a) Find the pairs of supplementary angles and circle these pairs:

 $15^0$  and  $165^0$ 

 $30^0$  and  $155^0$ 

 $45^0$  and  $125^0$ 

b) Find the pairs of complementary angles and circle these pairs:

15<sup>0</sup> and 75<sup>0</sup>

25<sup>0</sup> and 65<sup>0</sup>

 $20^{0}$  and  $60^{0}$ 

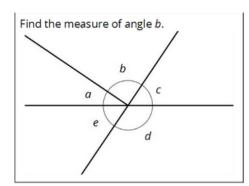
10

We know that:

- Angles *a* and *c* are complementary angles
- The measure of angle  $d = 124^{\circ}$
- The measure of angle  $c = 56^{\circ}$
- Angles c and e have equal measures.

Find: The measure of angle b.

Angle b =



### HW 14

# Parallel and Perpendicular lines. Using compass for measuring distances. Long multiplication.

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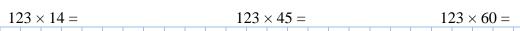
Use long multiplication to find answers to each of the following problems:





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Use partial method to solve:





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The table below consists of 8 columns and 6 rows. Is it possible to place check mark symbols in such a way?

- a) to get 4 check marks in each row and 3 check marks in each column?
- b) to get 3 check marks in each row and 2 check marks in each column?

