## Homework 23 (2017-18)

1.

a) Without calculations, write all expressions in the descending order (from the largest to smallest):

 $12 \times 123$ ,  $123 \times 14$ ,  $123 \times 17$ ,  $18 \times 123$ ,  $123 \times 15$ ,  $13 \times 123$ 

b) Without calculations, write all expressions in ascending order (from the smallest to largest):

 $210 \div 1$ ,  $210 \div 15$ ,  $210 \div 13$ ,  $210 \div 10, \quad 210 \div 16,$  $210 \div 12$ 

2.

What numbers can you make with 1, 2, and 3 using operations of addition, subtraction, and multiplication as well as parentheses?

For example, to obtain 7 and 9, the parentheses can be used:

$$3 \times (2+1) = 9$$
  $3 \times 2 + 1 = 7$ 

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- Find a way to make 1.
- Find a way to make 3.
- Find a way to make 4.
- Find 3 different ways to make 5

Can you make 10?

$$1 \text{m} = 10 \text{ dm} = 100 \text{ cm}$$
  $1 \text{ m}^2 = 100 \text{ dm}^2 = 10,000$ 

$$2 cm^2 + 5 cm^2 = \underline{\hspace{1cm}} cm^2$$

$$3 dm^2 - 2 dm^2 = \underline{\qquad} dm^2$$

$$15 \text{ cm}^2 - 7 \text{ cm}^2 = \underline{\qquad} \text{ cm}^2$$

$$11 \text{ dm}^2 + 7 \text{ dm}^2 = \underline{\qquad} \text{ dm}^2$$

$$500 \text{ cm}^2 + 1 \text{ dm}^2 = \underline{\qquad} \text{cm}^2$$

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## Homework 23

4. Compare using >, <, or =.

 $200 \text{ cm}^2 \square 3 \text{ dm}^2$   $500 \text{ dm}^2 \square 5 \text{ m}^2$   $30 \text{ dm}^2 \square 1 \text{ m}^2$ 

 $300 \text{ dm}^2 \square 300 \text{ m}^2$   $70 \text{ cm}^2 \square 7 \text{ dm}^2$   $20 \text{ m}^2 \square 200 \text{ cm}^2$ 

 $7 \text{ m}^2 \square 700 \text{ dm}^2$   $9 \text{ m}^2 \square 900 \text{ cm}^2$   $9 \text{ dm}^2 \square 900 \text{ cm}^2$ 

 $600 \text{ dm}^2 \square 8 \text{ m}^2$   $6 \text{ dm}^2 \square 80 \text{ cm}^2$   $4 \text{ m}^2 \square 400 \text{ cm}^2$ 

Make a list of the first ten multiples of 3.

- a) Which of the numbers in your list are multiples of 6? circle them!
- b) What pattern do you see where the multiples of 6 appear in the list? write your answer:\_\_\_\_\_
- c) Which numbers in the list are multiples of 7? Can you predict when multiples of 7 will appear in the list of multiples of 3? Explain your reasoning.

\_\_\_\_\_

**6.** What time was 240 minutes after the beginning of January 1, 2018?

7. Tehya and Kenneth are trying to figure out which number could be placed in the box to make this equation true.

Tehya insists that 12 is the only number that will make this equation true.

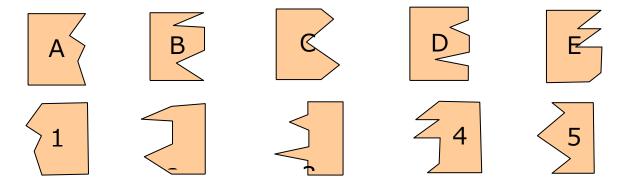
Kenneth insists that 3 is the only number that will make this equation true.

$$2 = \square \div 6$$

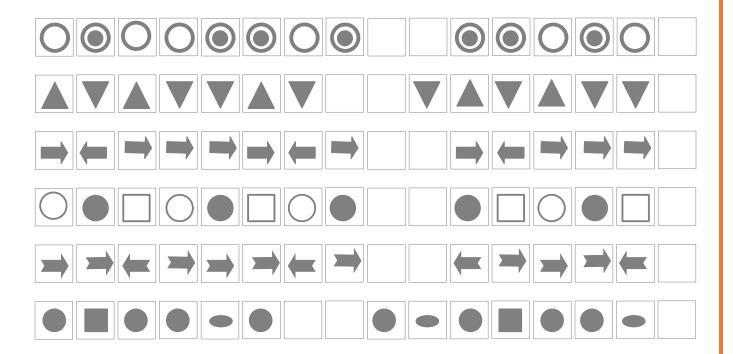
Who is right? Why? Draw a picture to support your idea.

## Homework 23

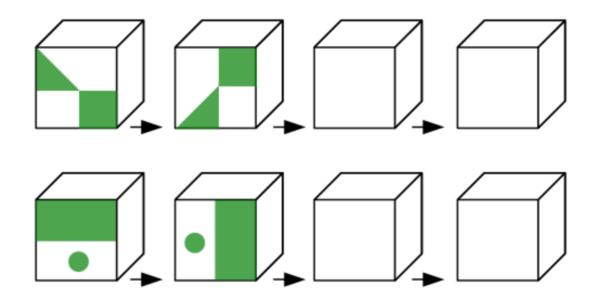
Match each shape from the top row with a shape from the bottom row that forms a rectangle when put together.



**9.** Identify each pattern and draw the missing symbols.



10. Guess which way the cube turns and reconstruct the missing drawings on the faces.



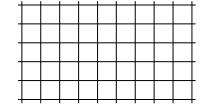
11. Solve the equations and check the answer

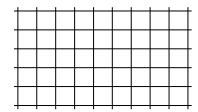
$$62 + x = 209$$

$$x + 700 = 801$$

$$x - 92 = 34$$







12. **Open** the parentheses:

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