school nova™

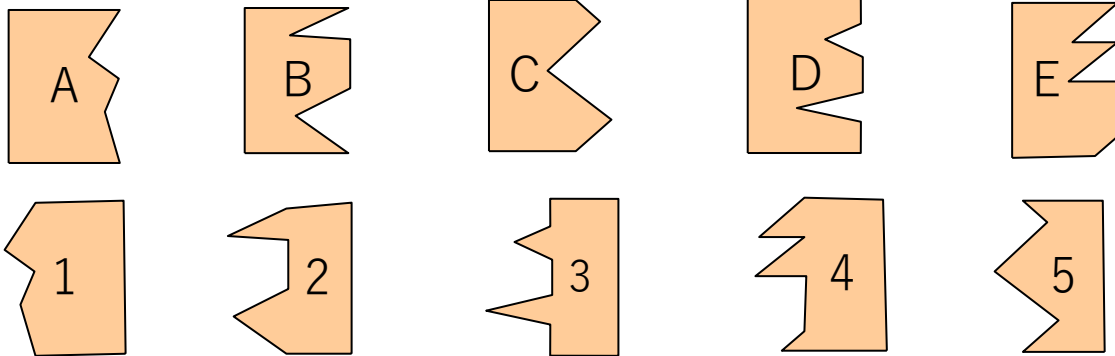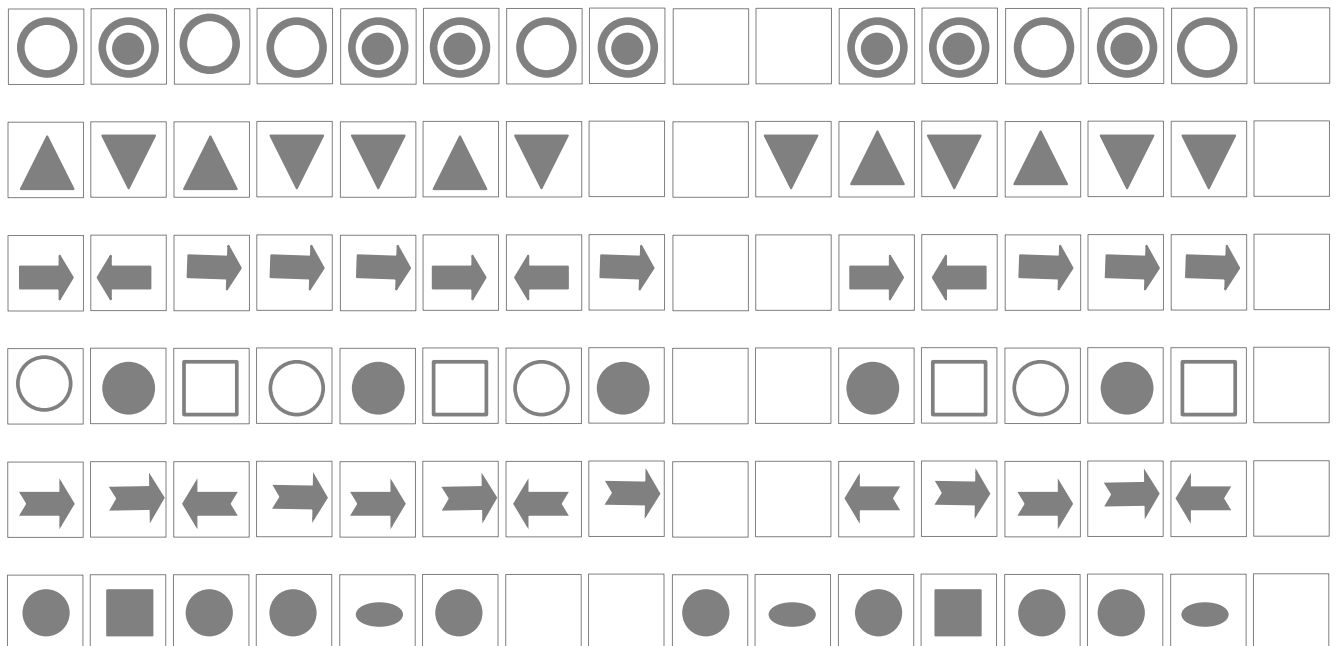### Practicing Math Kangaroo

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

A   B   C   D   E

1   2   3   4   5

2 Identify each pattern and draw the missing symbols.

3 Find the 3-digit numbers, where the digit in its ten places is twice the digit in its hundreds place. The digit in its one place is 4 times the digit in its hundreds place. Write down all numbers that satisfy these conditions.

_____

_Time this page_____

4

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

$2 \text{ cm}^2 + 5 \text{ cm}^2 = $ _____ cm^2 $3 \text{ dm}^2 - 2 \text{ dm}^2 = $ _____ dm^2

$15 \text{ cm}^2 - 7 \text{ cm}^2 = $ _____ cm^2 $11 \text{ dm}^2 + 7 \text{ dm}^2 = $ _____ dm^2

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

5

Compare using $>$, $<$, or $=$.

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

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

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

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

6

One-digit-one-line Long Multiplication. **Remember about Place Value!**

a) $23 \times 11 = $ b) $234 \times 111 = $ c) $2345 \times 1111 = $

7.

Solve for x:

a) $160 \div x + 84 = 124$ b) $(x + 84) \div 16 = 18$

Report the time you spent: _____
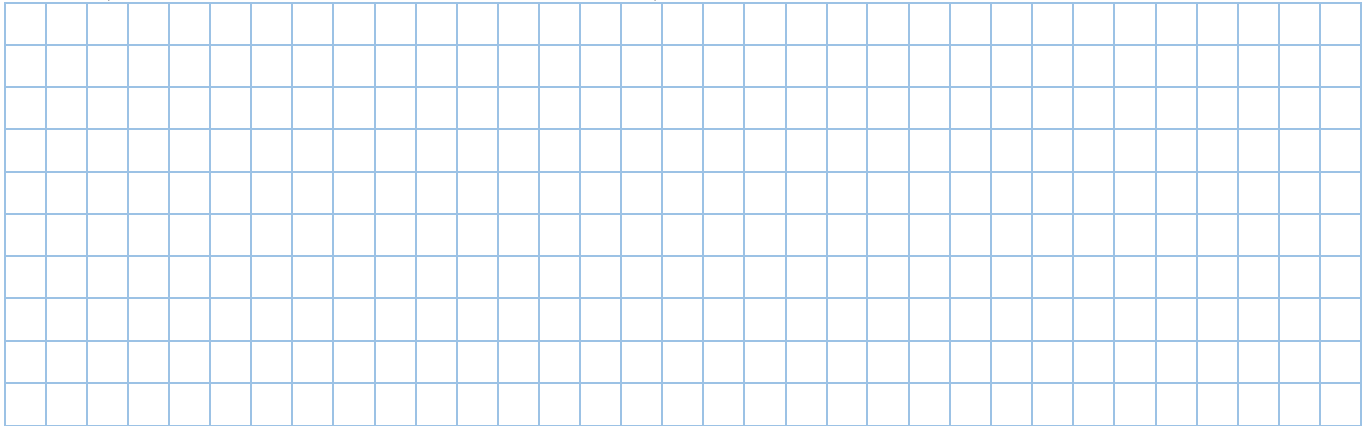
8

Long Division:

a) $1,112 \div 8 =$ b) $3,912 \div 8 =$

9.

The New Year's party was in the big, nice room. The room had a shape of a   rectangle with a length of 20 meters and a width of 10 meters. The room was decorated with multicolor lights, each light was 60 centimeters apart from the next one. How many lights were used to decorate the room?

_____

_____

_____

10

16 children in the class like apples. 11 children in the class like bananas. 7 children in the class like both apples and bananas. 3 children in the class do not like any fruits. How many children are there in the class? Draw the Venn diagram to help yourself to solve the problem. Draw a Venn diagram if needed.

Independent work

11

Postal workers must not lift more that 16 kg. There are 6 packages with a different weight: 3100g, 4900g, 3950g, 7200g, 3700g and 8900g.
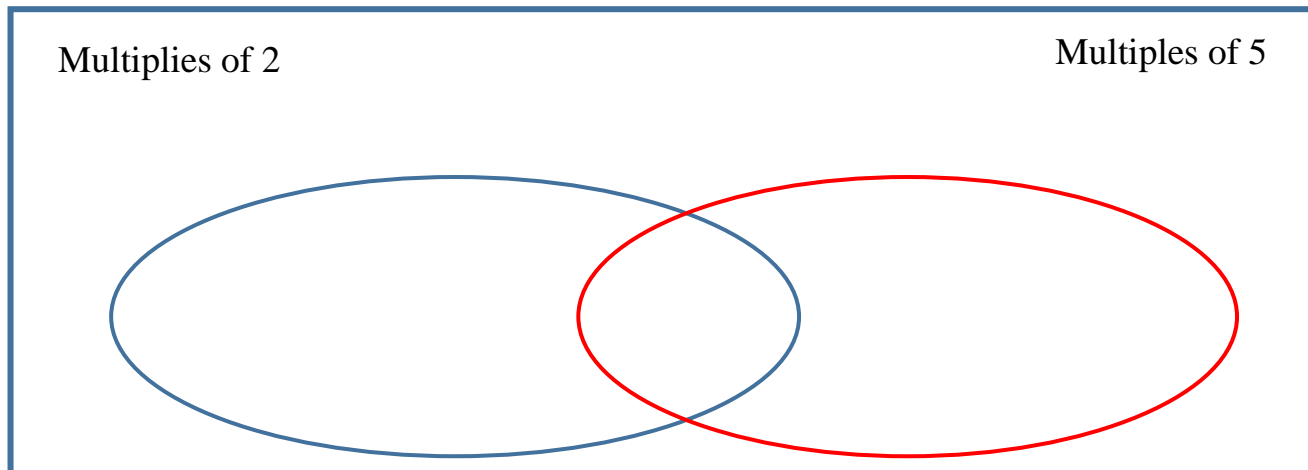Arrange these packages into 2 piles so that each pile can be lifted safely.
1) _____
2) _____

12

Put the following numbers into Venn diagram: 785, 1040, 998, 48330, 7585, 48021, 31970, 72123, 60075, 59927, 4294, and 8599 .

Multiplies of 2   Multiples of 5

13

In the picture below set P is a set of squares and set Q is a set of Large shapes. Draw a Venn Diagram for these sets.

Venn Diagram:

Which shapes belong to set P, but not to set Q? _____
Which shapes belong to set Q, but not to set P? _____
Which shapes belong to both sets? _____

Fill in symbols belong or does not belong ∈, ∉:

a ____ P   f ____P   e ____P   c ____P
a ___Q   c ____Q   g____Q   d _____Q

14

a) List all 2-digit numbers which can be divided by 8: _____

b) List all numbers between 60 and 90 what can be divided:

By 3: _____

By 4: _____

By 6: _____

15

A road construction team is repairing a road. It has repaired 156 meters. The remaining part is 5 times the part repaired. What is the total length of the road? Draw a diagram to help yourself solve a problem.

16

a) Draw a quadrilateral in which all of the angles are different sizes. Label the angles.
b) Draw a quadrilateral in which two of the angles are the same size. Label the angles.

17

Add parenthesis to the following equalities to make them correct:

$3 \times 174 + 26 = 600$

$168 \div 2 \times 3 = 28$

$100 \div 5 + 5 - 5 \times 2 = 0$

$100 \div 5 + 5 - 5 \times 2 = 20$

$100 \div 5 + 5 - 5 \times 2 = 40$

18

Write suitable signs from $+, -, \div, \times$ OR ( ) into the following number sentences to make all equalities correct.

Example: $4 + 4 - 4 - 4 = 0$

a) $4 \quad 4 \quad 4 \quad 4 = 1$ b) $4 \quad 4 \quad 4 \quad 4 = 2$ c) $4 \quad 4 \quad 4 \quad 4 = 3$