A quiz and games day!

We will play some games today, but first please do a quiz to check what we have learned in last eleven lessons.
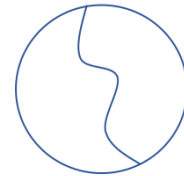
1 Fill in the diagrams for the equations, solve them, and check your answers.

x	-	2	4	=	5

4	8	-	x	=	1	3

x	+	3	5	=	6	7

2 Calculate:

```
   3 4          5 1          4 6          8 5
 + 2 9        -  2 7       +  2 5       -  3 8
```

3 Use a ruler.

- Plot straight line (**NQ**).
- Plot ray [**RT**).
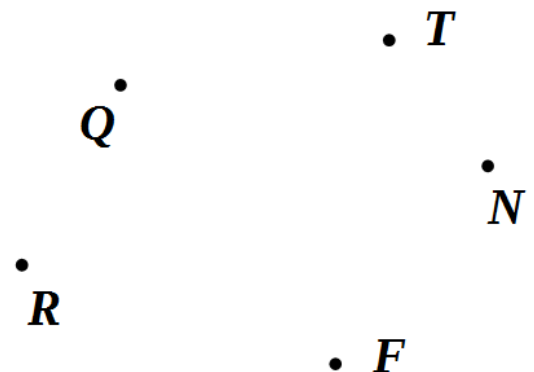- Label the intersection **M**.
- Plot segment [**MF**].

Make a right-angle template.
Using the template compare the following angles. Mark with YES the ones that are larger than the right angle.

_____∠RMF   _____∠QMF
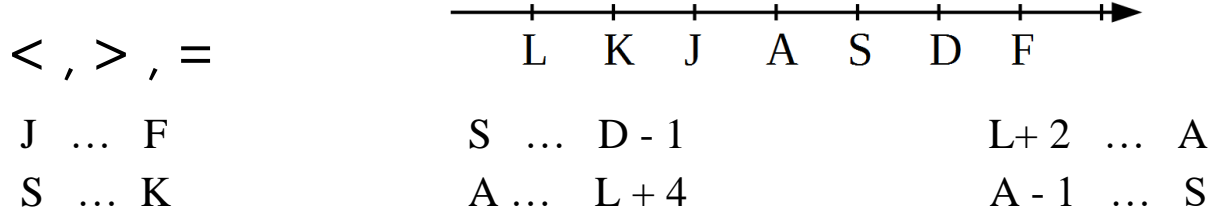
_____∠FMT   _____∠TMN

• **T**

Q

• **N**

• **R**

• **F**

4 Look at the number line where letters have replaced the actual numbers.
We know that L +1 = K. Compare.

< , > , =

L K J A S D F

J ... F   S ... D - 1   L+ 2 ... A

S ... K   A ... L + 4   A - 1 ... S

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5 Mark the order of operations and solve:

15 + 20 – 10 + 5 = _____

(15 + 20) – (10+ 5) = _____

15 + (20 – 10 + 5) = _____

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5 Compare:

a ...... a + 10   n ...... n - 5

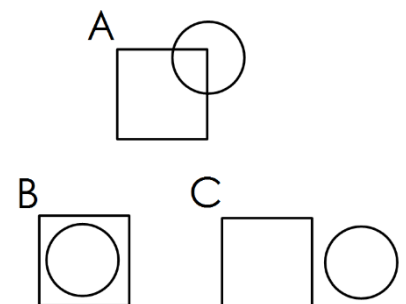a – 5 ..... a – 5 + 1   n – 3 ......n – 3 +10

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6 Write the expressions.

There are **m** books on the first shelf and **n** on second one. How many books are on both

shelfs? _____

There are **k** pencils in two boxes. There are **d** pencils in the first box. How many pencils

are in second? _____

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7 Which diagrams A, B, or C represent

- a set of roses and set of apples _____

- a set of roses and set of red roses_____

- a set of red flowers and set of roses_____ .

A

B   C

Games time!

1. 12 → 21
2. 33 → 33
3. 8 → 8
4. 49 → 94
5. 51 → 15
6. 123 → 321

235 → ?

1. car → 1
2. crayon → 3
3. crocodile → 4
4. book → 2
5. bee → 2
6. light → 1

Christmas → ?

Now it is time for your very own Black Box!

Fun problems (Math Kangaroo and not olny)

A
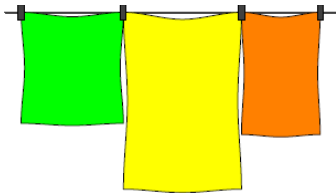Complete the equalities using the digits from 0 to 9. Each digit can be only use once.

$$\square + \square = \square\,\square$$

$$\square + \square = \square$$

$$\square + \square = \square$$
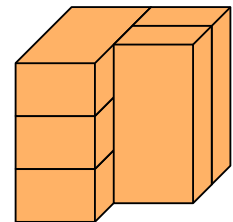
B SAMPLE QUESTION FOR 4 POINTS

Father hangs the laundry outside on a clothesline. He wants to use as few pins as possible. For 3 towels he needs 4 pins, as shown. How many pins does he need for 9 towels?

A) 9   B) 10   C) 12   D) 16   E) 18

C SAMPLE QUESTION FOR 3 POINTS

The picture shows 5 identical bricks.
How many bricks are touching exactly 3 other bricks?

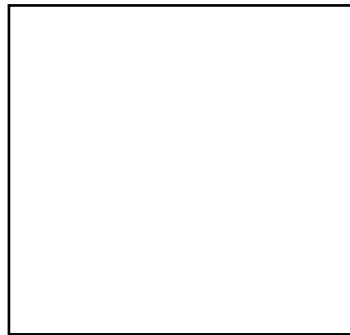(A) 1   (B) 2   (C) 3   (D) 4   (E) 5

SAMPLE QUESTION FOR 4 POINTS

Kanga wrote down a number and then covered each digit with a shape. She covered different digits by different shapes, and the same digits by the same shape. Which number could be under the shapes shown to the right?

(A) 34426   (B) 34526   (C) 34423   (D) 34424   (E) 32446

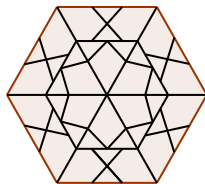E Put 10 chairs along the walls of a square room in such a way that equal numbers of chairs will be along each wall.
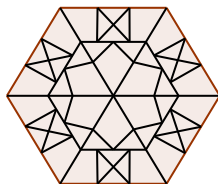

F **SAMPLE QUESTION FOR 5 POINTS**

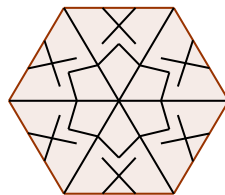Arjun has 6 identical triangles like this: . Which of the following pictures can he make?

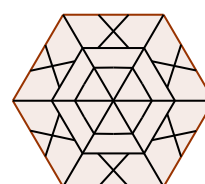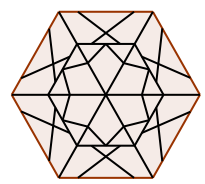(A)   (B)   (C)   (D)   (E)