

Practicing Kangaroo:

1. There are 12 books on a shelf and four children in a room. How many books will be left on the shelf if each child takes one book?



- (A) 12 (B) 8 (C) 4 (D) 2 (E) 0

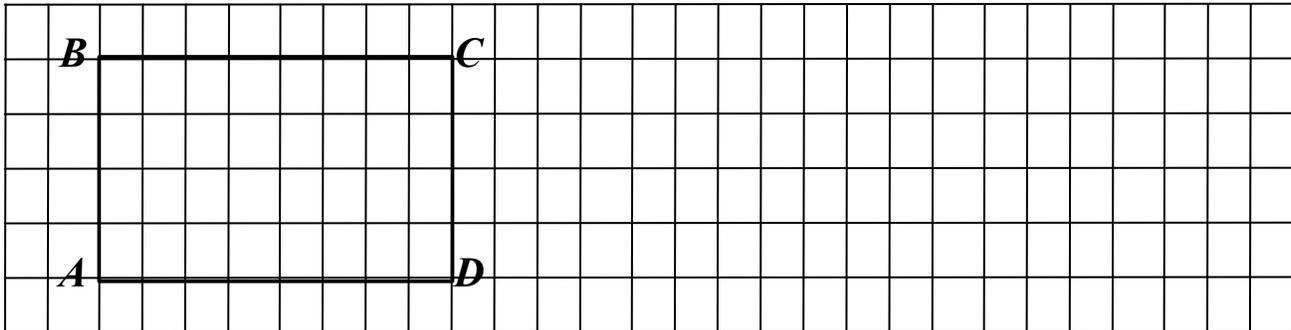
2. Kasia has 3 brothers and 3 sisters. How many brothers and how many sisters does her brother Mike have?

- (A) 3 brothers and 3 sisters (B) 3 brothers and 4 sisters (C) 2 brothers and 3 sisters
(D) 3 brothers and 2 sisters (E) 2 brothers and 4 sisters

3. Ana has one coin of 5 cents, one coin of 10 cents, one coin of 20 cents and one coin of 50 cents. How many different values can she make with these coins?

- (A) 4 (B) 7 (C) 10 (D) 15 (E) 20

1. Find the perimeter of the rectangle ABCD plotted on the drawing. Express the perimeter in squares. Draw another rectangle A'B'C'D' next to the ABCD with a perimeter, which is 8, squares bigger. What are the lengths of its sides?



Length of side $|AB| = 4$ squares

$|A'B'| =$ _____

Length of side $|BC| = 8$ squares

$|B'C'| =$ _____

$P =$ _____

$P' =$ _____

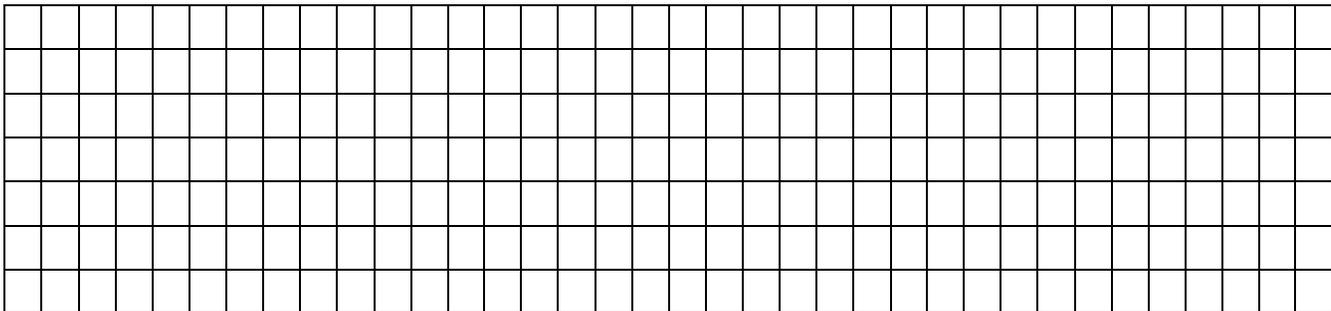
2. Number the order of operations and find the values of each expression (use the graph paper below to calculate!)

$215 - (38 + 169) =$ _____

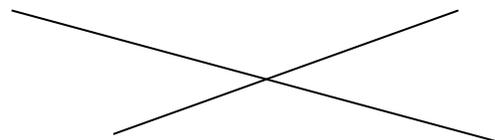
$500 - (239 + 85) + 457 =$ _____

$(357 + 194) - 263 =$ _____

$(304 - 26) - (72 + 168) =$ _____

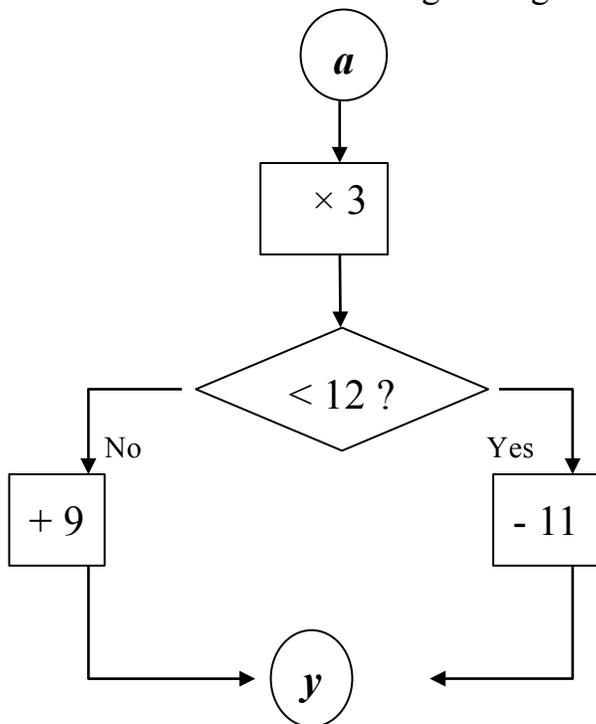


4. Ann plotted two intersecting straight lines. On one of the lines she labeled 3 points. On the other line she labeled 5 points. Totally she has labeled 7 points.



How is that possible? Show on the picture.

5. Fill in the table, writing for each given value of a the corresponding value of y , calculated using the algorithm below:



a	1	2	3	4	5	6	7	8	9
y									

6. Look at the table showing how to add numbers from 1 to 3. Cut out the table and fold it over the dotted line. Notice that the blue squares match up and so do the orange squares. Notice that the squares that match up have the same numbers in them. We say that the squares that match up when you fold along the line are "**mirror images**" of each other.

Explain why the numbers in the orange squares are equal.

+	1	2	3
1	2	3	4
2	3	4	5
3	4	5	6

7.

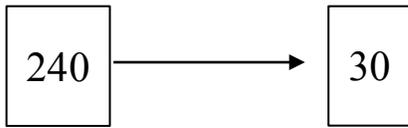
The table below shows how to add numbers from 1 to 9. Two squares are shaded blue and two are green:

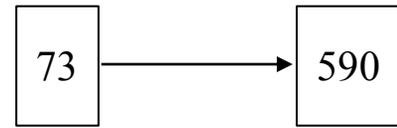
Are the blue squares mirror images of each other? Explain why? Are the green squares mirror images of each other? Explain why the numbers in the green squares are equal. Shade the rest of the mirror image squares with the same color. Why are the mirror image numbers always equal?

+	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	10
2	3	4	5	6	7	8	9	10	11
3	4	5	6	7	8	9	10	11	12
4	5	6	7	8	9	10	11	12	13
5	6	7	8	9	10	11	12	13	14
6	7	8	9	10	11	12	13	14	15
7	8	9	10	11	12	13	14	15	16
8	9	10	11	12	13	14	15	16	17
9	10	11	12	13	14	15	16	17	18

8.

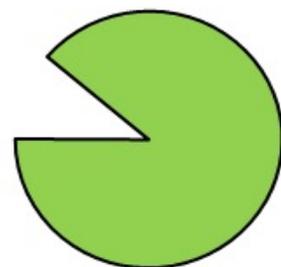
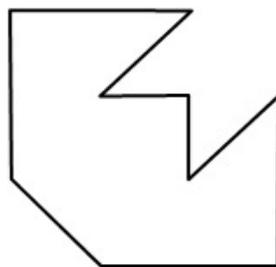
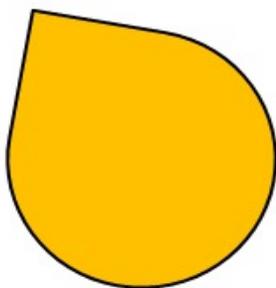
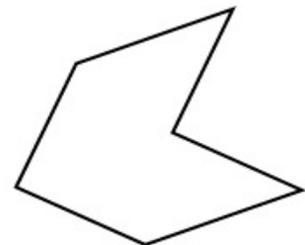
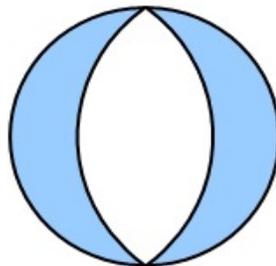
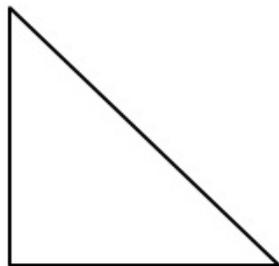
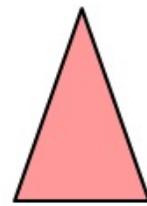
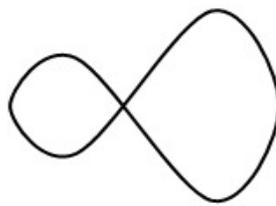
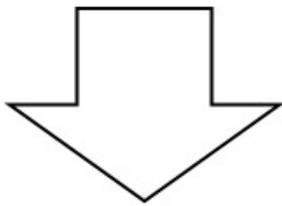
Construct and solve equation for each diagram below:





9.

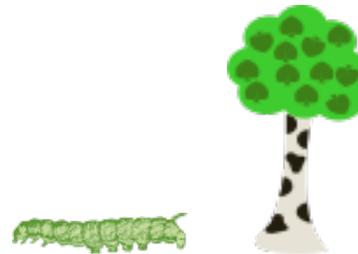
Each shape below has a line of symmetry. Draw a line of symmetry for each shape.



11.

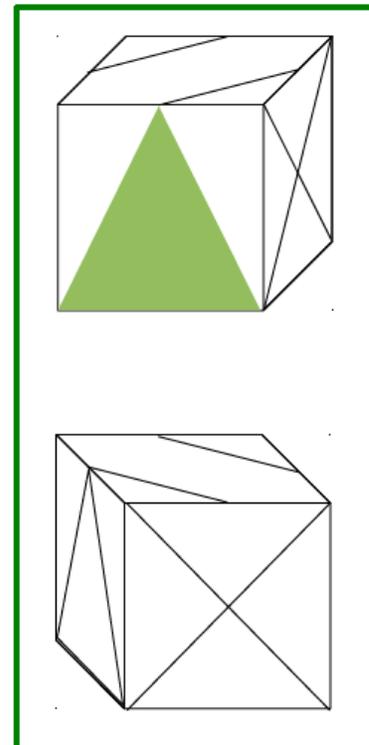
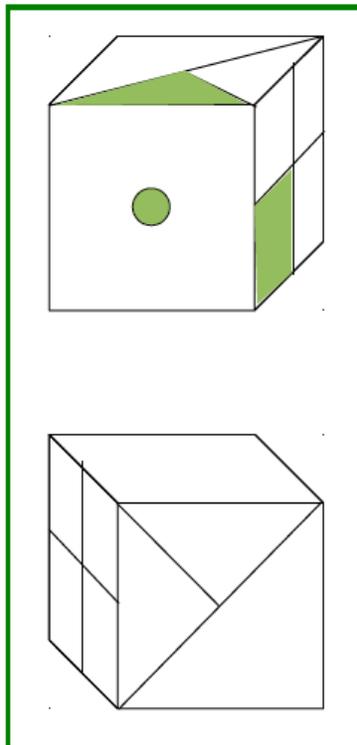
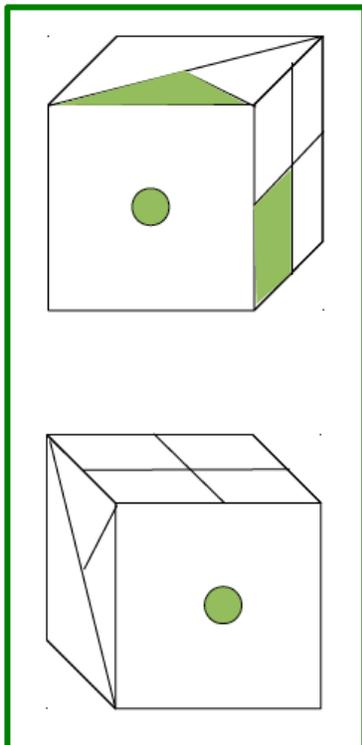
Kyle's dog usually eats twice a day. Once the dog lost its appetite and did not eat for 3 days in a row. How many treats did the dog eat that week? _____

A caterpillar climbs a tree. Each day it crawls 2 meters up and each night it crawls 1 m down. How many days will it take to crawl to the top if the tree is 15m high?



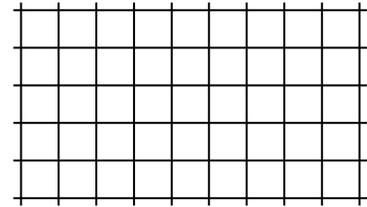
12.

Cubes in each green box are identical but rotated. Correctly color the faces of each cube

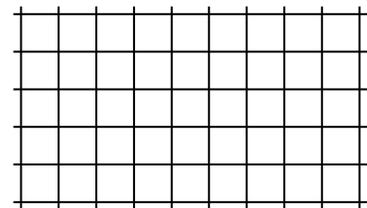


12. Solve each problem by expressing numbers in cm:

- a) The length of a newborn baby whale was 5 m 3 dm 2 cm. Once he grew up he was 32 m 6 dm 7 cm long! How much did he grow?



- b) An ant crawled 16 m 4 dm 5 cm towards home. He had 9 m 1 dm 3 cm left to crawl. How far away was his home when he started?



12. Write only A's to balance each scale:

