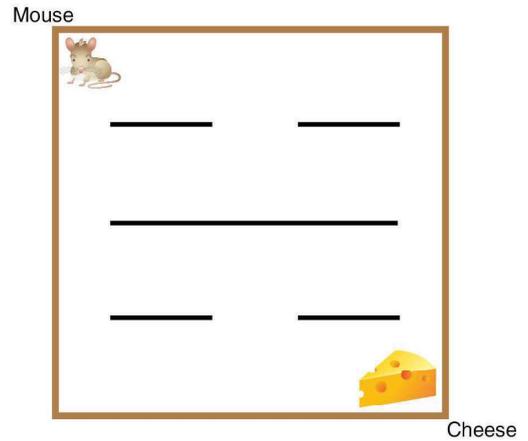


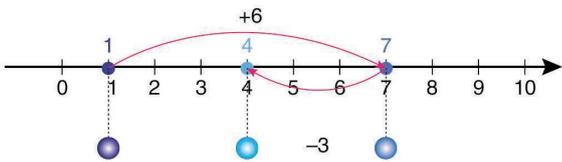
Bruce sketched two rectangles on the grid plane as shown in the figure. What is the difference of the perimeters of the rectangles?

- A) 12 B) 8 C) 6 D) 4



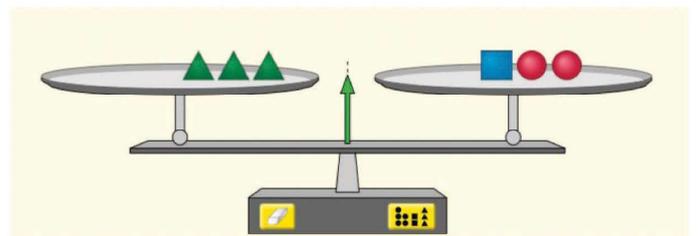
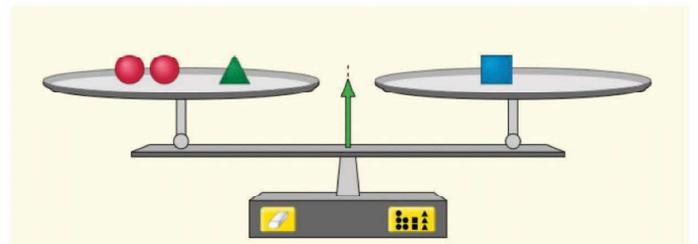
A mouse wants to reach to the cheese as seen on the figure without stepping on the lines inside the room. In how many different paths can the mouse use to reach to the cheese?

- A) 6 B) 8 C) 24 D) 12



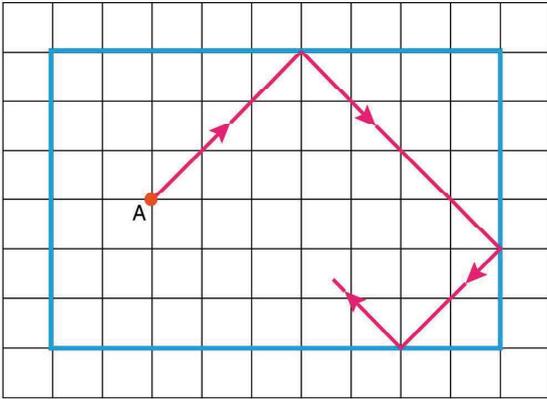
Which of the following operations is modelled by the figure given above?

- A) $1 + 6 - 3 = 4$
 B) $0 + 7 - 4 = 3$
 C) $1 + 4 = 7 - 3$
 D) $7 - 4 + 3 = 4$



In the figure, both scales are at the balance. What is the relation between the weights of the objects?

- A) 1 red = 4 blue = 2 green
 B) 2 red = 3 blue = 4 green
 C) 4 red = 1 blue = 2 green
 D) 3 red = 2 blue = 1 green



A billiard ball shot from the point A moves on the path with a constant speed as shown in the figure. After how many times hitting the walls of the table will the ball pass through the point A and follow the same direction?

- A) 5 B) 6 C) 9 D) 10

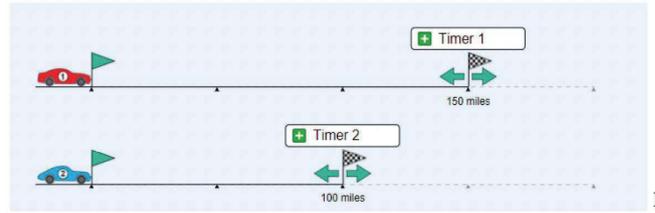


Figure 1

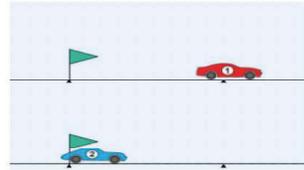
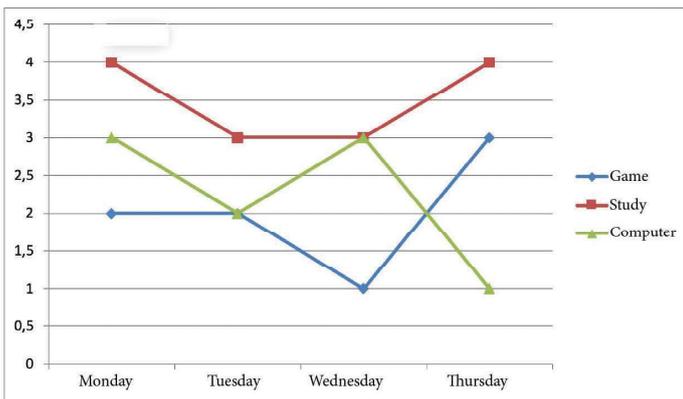


Figure 2

As shown in the Figure 1, the first race car reaches to the finish line in 3 hours and second race car reaches to the finish line in 2.5 hours. If they start at the same time, what is the distance between the cars after 1.5 hours?

- A) 40 B) 35 C) 25 D) 15



Graph shows the time schedule of a student during his holiday. What should be the purpose of this graphing?

- A) To see what is done during the holiday.
 B) To compare the time spent on computer to the time spent on other games.
 C) To see the change in the time spent to the games along the days.
 D) To calculate the total time spent on computer during entire holiday.

$$x + 2y - 5 = 0$$

$$y = 2x$$

What is the common solution of the given equations?

- A) (-1,2) B) (2,1) C) (1,2) D) (1,-2)

Zaza drives 40% of 600 km distance and takes a rest. Then, he takes 50% of the remaining distance. How many kilometers of the distance is left for Zaza to finish the entire trip?

- A) 420 km B) 60 km C) 180 km D) 120 km

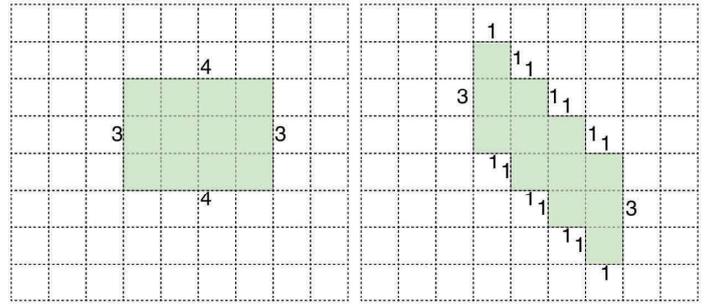


Figure 1 (3*4)

Figure 2

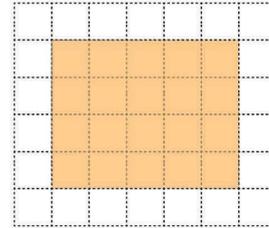
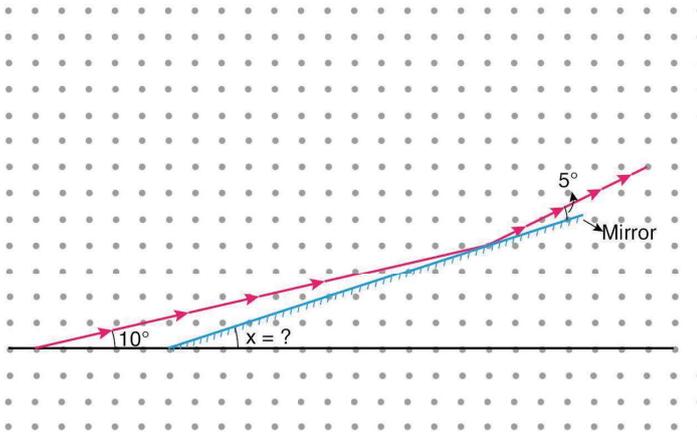


Figure 3 (4*5)

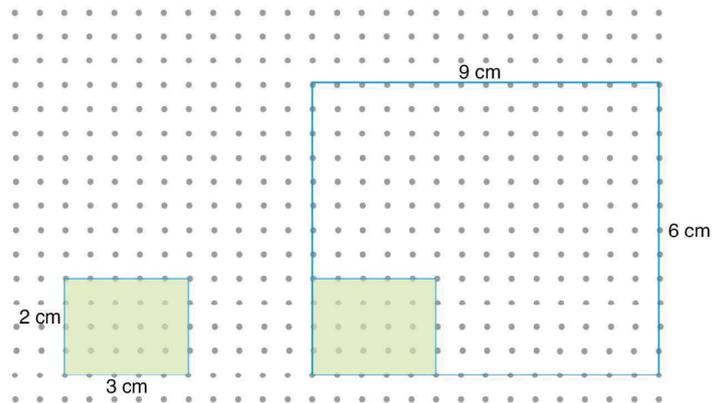
Each column in the Figure one is moved 1 unit downward and the shape in the Figure 2 is obtained. If the same operation is applied to the shape in the Figure 3, what will happen to the perimeter of the shape?

- A) stays unchanged B) increases 6 units
C) increases 4 units D) increases 8 units



A light beam reflected from the ground at 10° angle also reflects from the mirror at 5° angle. If the angle of incident ray and reflected ray have equal angles from the mirror, then what is the measure of x ?

- A) 5° B) 10° C) 15° D) 20°



Small rectangles with the length 3 cm and the width 2 cm will be placed inside a larger rectangle with the length 9 cm and the width 6 cm. At most, how many identical small rectangles can fit inside the larger rectangle?

- A) 6 B) 9 C) 8 D) 12