**Variable exercises**

1. Generate a random number from 15 to 1000. This will be the amount of money you have. If the cost of a ticket for a hockey game is $73.15, what is the maximum number of tickets can be bought for the money you have? Calculate and display the change (separately dollars and cents).

For example,

**With 240 dollars you can buy 3 tickets.**

**The change is 20 dollars and 55 cents.**

1. Suppose that x and y are values that represent the Cartesian coordinates of a point (*x*, *y*) in the plane.

* Declare variables x and y.
* Assign to x a random number form the following set:

{5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20}

* Assign to y a random number form the following set:

{2, 4, 6, 8, 10, 12, 14, 16}

* Print the coordinates.
* Calculate and print the distance to the point from the origin rounded to 1 decimal place.

For example,

**Point is (9,14)**

**The distance from the point the origin is 16.6**

1. *Three-sort.* Write a program that generates three random int values from 10 to 50 inclusive. Print them as they are generated and also print them in ascending order. Use only Math.min() and Math.max(). Don’t use if statements or switch.

For example,

**Numbers are: 41 12 36**

**In ascending order: 12 36 41**