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Define / Give an Example with output of Each Shorthand Assignment Operators

+=: shorthand operator that add the value on the right, to the variable on the left, and then assigns that value back into the variable on the left.

Int a = 6; a+= 5;

Output: 11

-=: shorthand operator that subtract the value on the right, to the variable on the left, and then assigns that value back into the variable on the left.

Int a = 6; a-=5;

Output: 1

\*=: shorthand operator that multiply the value on the right, to the variable on the left, and then assigns that value back into the variable on the left.

Int a = 6; a\*= 5;

Output: 30

/=: shorthand operator that divide the value on the right, to the variable on the left, and then assigns that value back into the variable on the left.

Int a = 6; a /= 5;

Output: 6/5

%=: shorthand operator that Module the value on the right, to the variable on the left, and then assigns that value back into the variable on the left.

Int a = 6; a %= 5;

Output: 1

Math library Introduction, Define Each

Math.random(): returns a random double value with a positive sign, greater than or equal to 0.0 and less than 1.0.

Math.round(x): round the x in to 1 decimal digit

Math.max(x, y): find the maximum number between x and y

Math.min(x, y): find the minimum number between x and y

Math.abs(x): The method gives the absolute value of the argument. If the value is negative, it will return a positive number.

**Programming Assignments**

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Task 1- Write a program that creates thee random **double** variables **a,b,** and **c** and assigns them values between 0 and 1 using the **Math.random()**

Method mentioned in the preceding exercise. It then does all of the following:

A. It prints out the three values.

B. It prints “All are tiny” if all three values are less than 0.2.

C. It prints out “One is tiny” if exactly one of the three values is less than 0.2

