

Java S16 Class 3 HW

Write a Java Program to solve each one of the problem. Please name your project as **Q#.Java**.

Upload each file individually with a #java-class3 to @homeworkbot

1. Write a program that assigns integer variables a,b values and print the sum, difference, product, and modulus.
2. Write a program that lets you enter the radius of a circle and that prints both the circumference and the area of the circle.
3. Write a program that lets you enter a degree measure in Fahrenheit, and that prints the result in Celsius degree measure.
4. Write a program that lets you enter a distance in kilometers and that converts it into miles.
 $1.6\text{km} = 1\text{mile}$
5. Write a program that lets you enter a number of hours, and that converts it to days and hours.
6. Write a program that lets you enter a number of minutes, and that will calculate the number of days, hours and minutes that represents.
7. Write a program that lets you enter the two sides of a right angled triangle, and that prints the hypotenuse.
8. Write a program that lets you enter the three sides of any triangle, and that prints the area of the triangle using Heron's formula: $\text{Area} = (s(s-a)(s-b)(s-c))^{0.5}$ where s stands for half the perimeter, where $s = (a+b+c) / 2$.
9. Write a program that lets you enter two sides of a triangle and the contained angle, and that will use the cosine law to calculate the third side: If the sides are a,b and the angle is C, then the third side is given by $((a^2+b^2-2ab\cos(C))^{0.5})$.