/\* Nicholas Carroll 3 December 2018

\* LAB 7: Get radius of a circle using constructors

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**package** lab7;

**public** **class** MainCircle {

**public** **static** **void** main(String[] args) {

Circle c1 = **new** Circle();

System.***out***.println("With radius: " + c1.getRadius(20) );

System.***out***.printf("The area of the circle is: %.2f %n", c1.getArea(20, 3.14159, 20) );

System.***out***.printf("The perimeter of the circle is: %.2f ", c1.getPerimeter(20, 3.14159, 20) );

}

}

**package** lab7;

**public** **class** Circle {

// Instance variables

**double** radius;

**double** area;

**double** perimeter;

**double** pi = 3.14159;

// Circle constructor

Circle() {

radius = 0;

area = 0;

perimeter = 0;

}

// Methods that perform calculations

**public** **double** getRadius(**double** radius) {

**return** **this**.radius = radius;

}

**public** **double** getArea(**double** area, **double** radius, **double** pi) {

**return** radius \* radius \* pi;

}

**public** **double** getPerimeter(**double** perimeter, **double** pi, **double** radius) {

**return** 2 \* pi \* radius;

}

}