

NAME: _____ Score _____/10

Please **print** your name**SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION**

- (1 pt.) The set of **Rational** Numbers consists of all numbers which can be written as fractions.
- (1 pt.) An equation is a mathematical statement which contains an **equal** symbol.
- (1 pt.) A conditional equation is an equation which is **true** when some real numbers are substituted for the variables and is **false** when some real numbers are substituted for the variables.
- (1 pt.) T F Every integer is a rational number.
- (1 pt.) T F $-7^2 = 49$
- (1 pt.) T F $-3 - 4 = 12$
- (2 pts.) Demonstrate your knowledge of “order of operations” by evaluating the following expressions.
 - $2 - [(7 - 6) + (9 - 19)] = 2 - [(1) + (-10)] = 2 - [-9] = 2 + 9 = 11$

b.
$$\frac{(3 - \sqrt{9}) - (5 - 8)}{-3} = \frac{(3 - 3) - (-3)}{-3} = \frac{0 + 3}{-3} = -1$$

- (2 pts.) Calculate the area of a circle with radius 5. **I want to see the formula you plan to use and I want an exact answer; not an approximation.**

The formula for the area of a circle is $A = \pi r^2$

So the area of this circle is given by $A = \pi 5^2 = 25\pi$