

III. Convert the following Java code into an algebraic expression. (1.5 pts)

```
x = (-b + sqrt(pow(b,2) - 4.0 * a * c))/(2 * a);
```

x = _____

IV. Answer the following (1 pt each)

1) What class must be used to use **ceil, floor, abs, pow, random, or sqrt**? 1) _____

2) In what package is the answer to IV.#1) found? 2) _____

V. Answer the following (1 pt each)

1) `(int)(Math.random()*(60) + 5)` generates random numbers between (inclusive) what two numbers? _____ and _____

2) Complete the following so that a random number between 10 and 100 would be generated. `(int)(Math.random()*(_____) + _____)`

AP Chapter 3 Worksheet 6 - Math methods

Name _____

1 of 2

Pts: 15

class hour _____

I. Determine the exact value of the following Java arithmetic expressions. (0.5 pts each)

- 1) Math.sqrt(16.0) 1) _____
- 2) Math.pow(2, 3) 2) _____
- 3) Math.abs(-3.4) 3) _____
- 4) Math.abs(-3.9) 4) _____
- 5) Math.ceil(5.1) 5) _____
- 6) Math.floor(5.1) 6) _____
- 7) Math.floor(5.9) 7) _____
- 8) Math.sqrt(Math.abs(-9)) 8) _____
- 9) Math.abs(Math.sqrt(Math.pow(3,2))) 9) _____
- 10) Math.round(-5.1) 10) _____
- 11) Math.round(7.9) 11) _____

II. Convert each of the following mathematical expressions to a Java arithmetical expression
(1 pt each)

- 1) $\frac{\sqrt{\text{rate} + \text{time}}}{2d}$ 1) _____
- 2) $\sqrt{x^2 + y^2}$ 2) _____
- 3) $(a + \sqrt{b})^7$ 3) _____
- 4) $\left| 2^{\sqrt{x}} \right|$ 4) _____

OVER