Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Solving Quadratics by Using Square Roots Practice**

**Review:**

Solve the following by factoring:

a. 2x2 + 16x + 14 = 0 b. 3x2 – 2x – 5 = 0

**Practice:**

Solve each quadratic equation.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 

**Defend:**

Abby is trying to solve the following problem:

5 = 3(x + 4)2

She begins explaining to her classmate Joe “the first step is to distribute the 3 and then you have 5 = (3x + 12)2, then you can take the square root of both sides.”

Joe looks puzzled, he tries to recall what Mrs. Dombrowski and Ms. Dawson said today in class. He replies “I thought we divide by 3 first Abby”.

She says “No, order of operations silly! PEMDAS!”

*Who is correct? Explain.*

**Error Analysis:**

Describe and correct the error Sarah made when attempting to solve by square roots.

Problem: (x + 2)2 = 36

*Sarah’s Process: Correct Process:*

(x + 2)2 = 36

$\sqrt{(x+2)^{2}}$ = $\sqrt{36}$

x + 2 = 6

x = 6 + 2 and x = 6 – 2

x = 8 and 4