

Student name: _____

Practice Questions page 32

First Activity:

19. $x^2 - 169 = 0$

16. $x^2 - 100 = 0$

Second Activity:

23. $16x^2 - 24x + 13 = 4$

Challenge:

43. **FIND THE ERROR** Jade and Mateo are solving $-12x^2 + 5x + 2 = 0$. Is either of them correct? Explain your reasoning.

Jade

$$-12x^2 + 5x + 2 = 0$$

$$-12x^2 + 8x - 3x + 2 = 0$$

$$4x(-3x + 2) - (3x + 2) = 0$$

$$(4x - 1)(3x + 2) = 0$$

$$x = \frac{1}{4} \text{ or } -\frac{2}{3}$$

Mateo

$$-12x^2 + 5x + 2 = 0$$

$$-12x^2 + 8x - 3x + 2 = 0$$

$$4x(-3x + 2) - (3x + 2) = 0$$

$$(4x + 1)(-3x + 2) = 0$$

$$x = -\frac{1}{4} \text{ or } \frac{2}{3}$$