

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

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

### Factoring Completely Task

Sasha and Pedro were asked to factor the polynomial  $9x^2 - 9$  completely and explain their process. Their work is shown below. Has either student factored the polynomial completely? Explain. If not, give a complete factorization.

#### Sasha's Work

$$9x^2 - 9 = (3x + 3)(3x - 3)$$

*I used the fact that  $9x^2 - 9$  is a difference of two squares.*

#### Pedro's Work

$$9x^2 - 9 = 9(x^2 - 1)$$

*I factored out the GCF.*