Factoring Composite Numbers

Factoring.tns

Name _____

Class _____

Problem 1 – Exploring a factor tree for a composite number

On page 1.3, view the factor tree and prime factorization of the number 24.

- Why is 3 the exponent for the factor 2?

- Is 24 a prime number? Explain.

Problem 2 – Exploring Division to find prime factors

On page 2.1, division is used to find the prime factors of the number 30. Use the calculator application to find the factors of 36.

- Prime factorization of 36
- Factor Tree of 36

Problem 3 – Using the factor command

On page 3.1, view how the factor command is used to find the prime factorization in exponent form. Use division and the factor command for the numbers 27, 56, and 72.

- Prime factorization of 27
- Prime factorization of 56

- Prime factorization of 72
- Factor tree for 72

Problem 4 – Frayer Square for open-ended response

Complete the four squares on page 4.2. Write your answers on the back of the worksheet.