Chapter 3 | Section 3.1 Factors and Multiples of Whole Numbers | Factors and Products

Name: David Adaszynski Date: _____

Learning Goal 3.2	Given a number or set of numbers, identify the prime factorization of each element and use it to find the GCF, LCM, perfect squares or cubes and/or factored form.

Daily Check In

Find the greatest common factor and the lowest common multiple of the following numbers. You may leave your answer in factored form.

$2^4 \times 3^6 \times 7^2 \times 19^8$ and $2^3 \times 5^9 \times 7^2 \times 17^1$ (same)

GCF $= 2^3 \times 7^2$ ✓

LCM $= 2^4 \times 7^2 \times 5^9 \times 3^6 \times 19^8 \times 17^1$ ✓

smallest exp ↓

GCF $2^3 \times 3^0 \times 5^0 \times 7^2 \times 17^0 \times 19^0$

LCM $2^4 \times 3^6 \times 5^9 \times 7^2 \times 17^1 \times 19^8$

↑ largest exp

Fantastic!! ☺

How did you do? (Circle one)	Emerging	Developing	Proficient	Extending
	☹	😐	🙂	😁

Chapter 3 | Section 3.1 Factors and Multiples of Whole Numbers | Factors and Products

Name: Daniel Date: Feb 3 2020

Learning Goal 3.2	Given a number or set of numbers, identify the prime factorization of each element and use it to find the GCF, LCM, perfect squares or cubes and/or factored form.

Daily Check In

Find the greatest common factor and the lowest common multiple of the following numbers. You may leave your answer in factored form.

$2^1 \times 3^8 \times 7^3 \times 19^4$ and $2^5 \times 3^9 \times 5^2 \times 17^3$

GCF $2^1 \times 3^8 \times 5^0 \times 7^0 \times 17^0 \times 19^0$ ✓

LCM $2^5 \times 3^9 \times 7^3 \times 5^2 \times 17^3 \times 19^4$ ✓

Astounding!! :)

How did you do? (Circle one)	Emerging	Developing	Proficient	Extending
				

Name: _____ Date: _____

Learning Goal 3.2	Given a number, a set of numbers or a polynomial expression, identify the prime factorization of each element and use it to find the GCF, LCM, perfect squares or cubes and/or factored form.

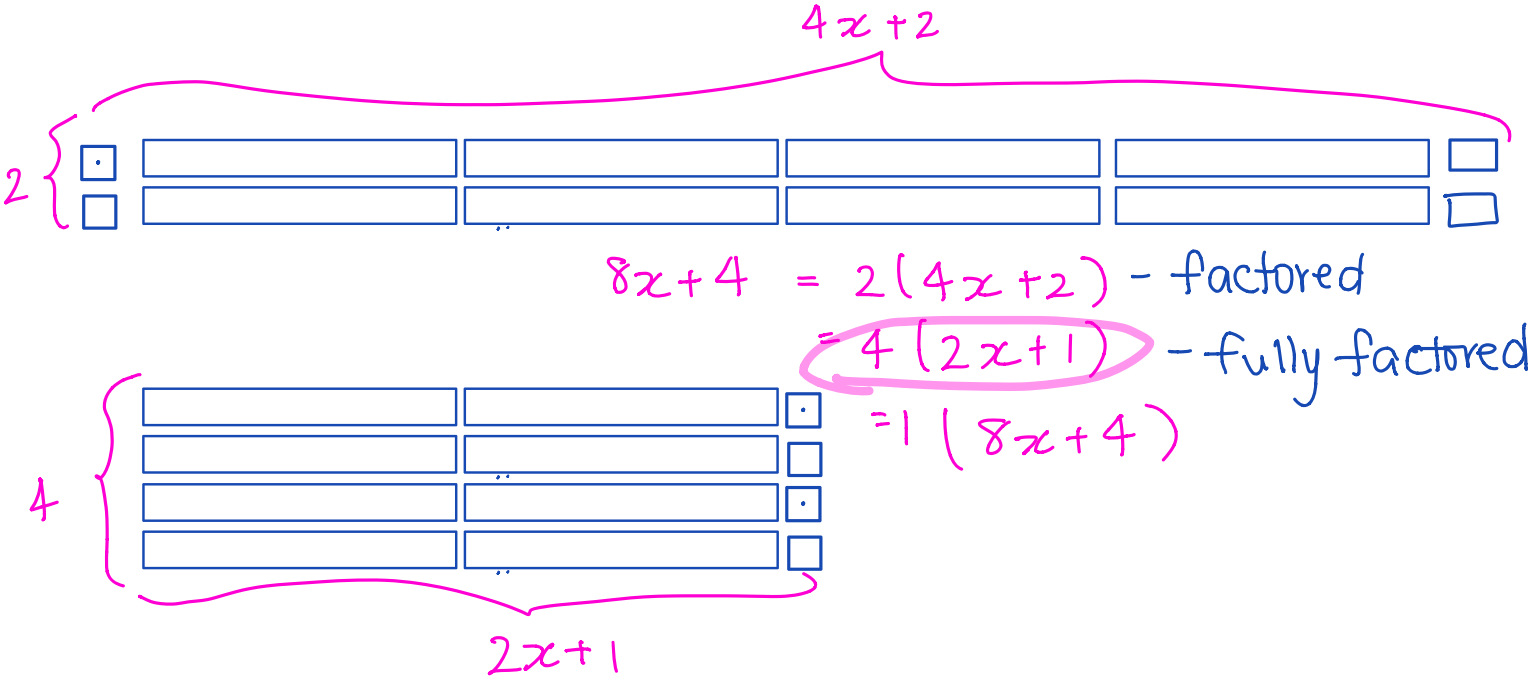
When finding factored form of an expression, the question is **really asking** for you to find the GCF.

1. Numbers - find the GCF of the coefficients.
2. Variable(s) - how many do they have in common.

Consider $8x + 4$. Using the appropriate algebra tiles:

- 8 sticks
- 4 little squares

Arrange the tiles into rectangles (there's more than one possibility). Draw the rectangles here. Please leave lots of space between your drawings.



$8x+4 = 2(4x+2)$ - factored

$= 4(2x+1)$ - fully factored.

$= 1(8x+4)$

Use algebra tiles to help you find different factored forms of the following expressions. Write down the factored expression next to each diagram.

1. $4x + 12$

2. $6m + 9$

3. $10k + 20$

4. $6c + 4c^2$

5. $8q^2 + 16$