Learning Objective: Students will be able to use Euclid's Ladder to find greatest common factors of two numbers.

Warm Up

70×11	35×52	41×41
74×26	42×93	54×42

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Warm Up Answers

70	35	41
× 11	× 52	× 41
70	70	41
700	1,750	1,640
770	1,820	1,681

74	42	54
× 26	× 93	× 42
444	126	108
1,480	3,780	2,160
1,924	3,906	2,268

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Homework Answers

1.4 Record and Practice Journal

List the factor pairs of the number.

1. 6
   $1 \cdot 6, 2 \cdot 3$
2. 7
   $1 \cdot 7$
3. 10
   $1 \cdot 10, 2 \cdot 5$
4. 16
   $1 \cdot 16, 2 \cdot 8, 4 \cdot 4$
5. 35
   $1 \cdot 35, 5 \cdot 7$
6. 55
   $1 \cdot 55, 5 \cdot 11$

Write the prime factorization of the number.

7. 9
   3^2
8. 24
   $2^3 \cdot 3$
9. 40
   $2^3 \cdot 5$
10. 44
    $2^2 \cdot 11$
11. 50
    $2 \cdot 5^2$
12. 65
    $5 \cdot 13$

13. A fitness instructor arranges 30 people into rows. Each row has the same number of people.

    a. Can the instructor arrange the people into rows of 6?
    yes

    b. Can the instructor arrange the people into rows of 9?
    no

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Lesson 1.5

October 8, 2015

Essential Question:

How can you find the greatest common factor of two numbers?

Lesson 1.5

October 8, 2015

Lesson Objective:

Students will be able to:

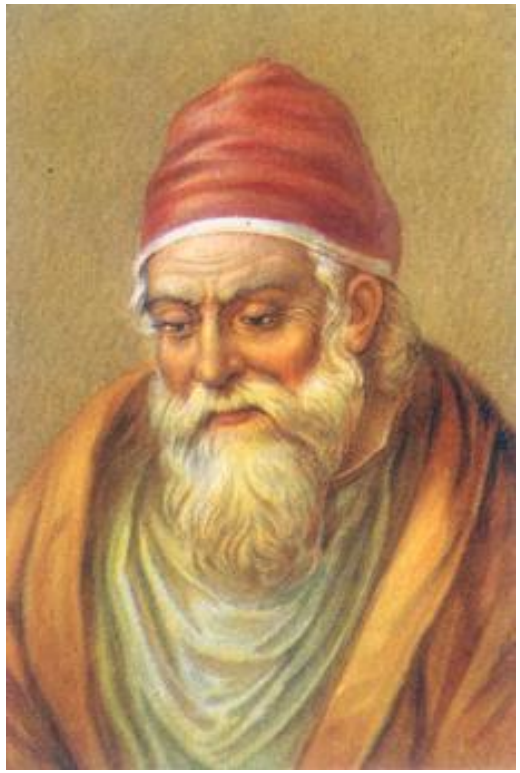
use Euclid's Ladder to find greatest common factors of two numbers.

Self-Evaluation Scale

Score	Description
4	I can teach other students how to use Euclid's Ladder to find greatest common factors of two numbers.
3	I can use Euclid's Ladder to find greatest common factors of two numbers.
2	I recognize, but still need help to use Euclid's Ladder to find greatest common factors of two numbers.
1	I do not know how to use Euclid's Ladder to find greatest common factors of two numbers.

Learning Objective: Students will be able to use Euclid's Ladder to find greatest common factors of two numbers.

Euclid



also known as Euclid of Alexandria, was a Greek mathematician, often referred to as the "Father of Geometry".

GCF

20 - 1, 2, 4, (5) 10, 20

45 - 1, 3, (5), 9, 15, 45

GCF = 5

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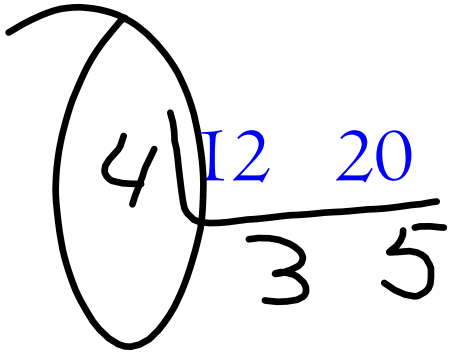
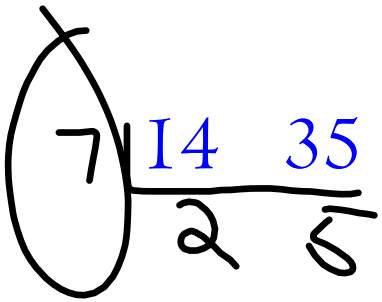
Euclid's Ladder





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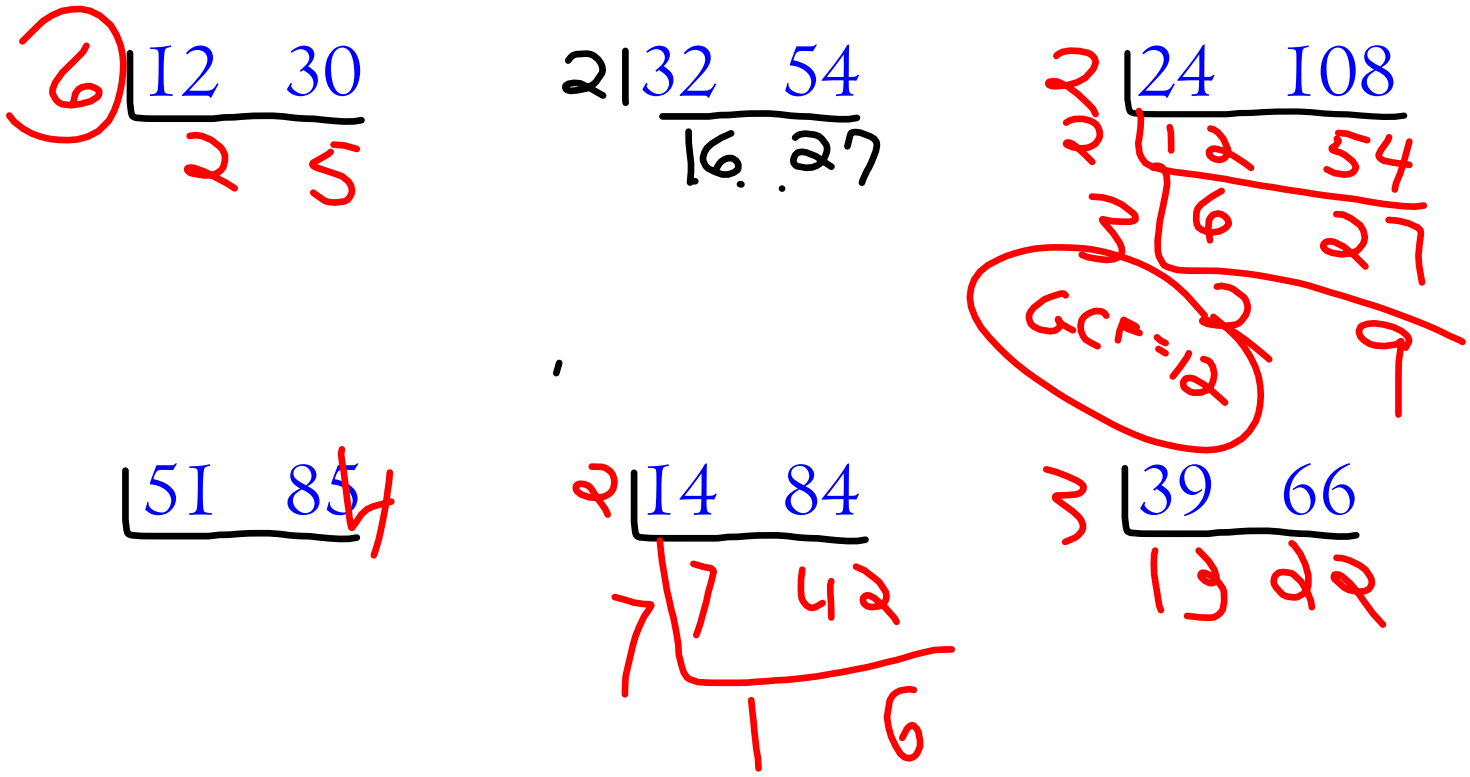
On Your Own



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Assignment

Complete problems 13, 15, 16, 23, 25, 26, 31, & 33 on pages 34 & 35 in your Big Ideas Text Book.

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Lesson 1.5 October 8, 2015

Essential Question:

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Homework

In your Big Ideas Record and Practice Journal page 22.