

Learning Objective: Students will be able to use Euclid's Ladder to find the Least Common Multiple of two numbers.

# Warm Up

Divisible by 9 and 3?

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 336 | 173 | 404 | 826 | 672 | 729 | 263 | 979 |
| 781 | 796 | 391 | 878 | 555 | 303 | 625 | 906 |
| 191 | 387 | 406 | 237 | 431 | 890 | 961 | 755 |

Divisible by 6?

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 796 | 661 | 452 | 147 | 573 | 994 | 525 | 621 |
| 821 | 376 | 540 | 203 | 459 | 475 | 768 | 923 |
| 737 | 879 | 464 | 819 | 437 | 615 | 220 | 978 |

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# Warm Up Answers

Divisible by 9 and 3?

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
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# Homework Answers

## 1.5 Record and Practice Journal

Find the GCF of the numbers using lists of factors.

1. 9, 15

**3**

2. 11, 19

**1**

3. 8, 28

**4**

4. 60, 70

**10**

5. 40, 56

**8**

6. 35, 72

**1**

Find the GCF of the numbers using prime factorizations.

7. 4, 10

**2**

8. 5, 11

**1**

9. 6, 8

**2**

10. 14, 42

**14**

11. 45, 63

**9**

12. 60, 90

**30**

13. You are making identical gift bags using 24 candles and 36 bottles of lotion.  
What is the greatest number of gift bags you can make with no items left over?

**12 gift bags**

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Lesson 1.6

September 29, 2016

## Essential Question:

How can you find the Least Common Multiple of two numbers?

Lesson 1.6

September 29, 2016

## Lesson Objective:

Students will be able to:

use Euclid's Ladder to find the Least Common Multiple of two numbers.

# Self-Evaluation Scale

| Score | Description   |
|-------|---|
| 4     | I can teach other students how to use Euclid's Ladder to find the Least Common Multiple of two numbers.   |
| 3     | I can use Euclid's Ladder to find the Least Common Multiple of two numbers.                               |
| 2     | I recognize, but still need help to use Euclid's Ladder to find the Least Common Multiple of two numbers. |
| 1     | I do not know how to use Euclid's Ladder to find the Least Common Multiple of two numbers.                |

Factors =  
equal to or  
less than number

Multiples =  
equal to or  
greater than the number

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# Euclid of Alexandria

lived from about 325 BC to about 265 BC

Euclid was a Greek mathematician best known for his treatise on geometry: *The Elements*. This influenced the development of Western mathematics for more than 2000 years.



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## Euclid's Ladder

$$\text{GCF} = 4$$

$$\begin{array}{r} 2 \mid 12 \quad 20 \\ \hline 2 \mid 6 \quad 10 \\ \hline 3 \times 5 \end{array}$$

$$2 \times 2 \times 3 \times 5 \\ \text{LCM} = 60$$

$$\mid 14 \quad 35$$

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## On Your Own

$$\begin{array}{r} | \\ \hline 12 \quad 30 \end{array}$$

$$\begin{array}{r} | \\ \hline 32 \quad 54 \end{array}$$

$$\begin{array}{r} | \\ \hline 24 \quad 108 \end{array}$$

$$\begin{array}{r} | \\ \hline 51 \quad 85 \end{array}$$

$$\begin{array}{r} | \\ \hline 14 \quad 84 \end{array}$$

$$\begin{array}{r} | \\ \hline 39 \quad 66 \end{array}$$

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

# Homework

I.5 Practice B worksheet

Log in to [bigideas.com](http://bigideas.com) and create profile