Step 1

There is an offline version of this course. You can buy it in book form.

Please review the FAQs and contact us if you find a problem with a link.

Course Description: Students will work through basic operations with integers, fractions, and decimals. Students will progress through the study of number properties as well proportions, rates, exponents, and radicals.

DIRECTIONS: This is an ordered list of 139 videos and exercises (with links) to complete Khan Academy arithmetic and pre-algebra. (This is the same course that it was before Khan Academy aligned with Common Core. I was able to update Khan Academy's links without changing the teaching. Where they have eliminated exercises, I just found alternatives on other sites.) You will start at the top of the page with Addition and Subtraction and work your way down in order. Make sure you read the directions every time. The first link on each line is to the video unless marked differently. You can move on to the exercise as soon as you know the material. That means you can do the exercise without watching the video if you already know how to do it. At some point, you should probably be watching all of the videos. When you do, write the problems down and work through them with the teacher to help you stay focused and to make sure you can do it too. Some days you will be doing more than one exercise. Some days you won't make it through one whole exercise. You will stay on an exercise until you are proficient. (According to Khan Academy that's the first one correct or five correct in a row. I suggest getting the first one wrong on purpose!) You should be able to do five in a row correct before you move on. One suggestion is to set aside 20–30 minutes for math each day. When you stop in the middle of an exercise, it should remember how many problems you've done. Make sure you make an account at Khan Academy and log in! (If you plan to use Khan Academy's built in tracking, please understand that Easy Peasy is not following entire courses built by Khan Academy; therefore, it may not show “mastery” in the records. It is suggested that you print this list of videos/exercises to check off progress by checking of videos and exercises completed.)

Addition and Subtraction with Positive and Negative Numbers

Lesson 1

1. If you didn’t get here through My EP Assignments, I suggest you go there and create an account.
2. **Basic Addition**
3. Complete the exercise.

Lesson 2
1. **Basic Subtraction**
2. Complete the exercise.

Lesson 3
1. **Addition 2**
2. Complete the exercise.

Lesson 4
1. **Subtraction 2**
2. Complete the exercise.

Lesson 5
1. **Addition 3**
2. Complete the exercise.

Lesson 6
1. **Subtraction 3: Introduction to Borrowing or Regrouping**
2. Complete the exercise. You don’t have to finish the whole exercise before moving onto #7.

Lesson 7
1. **Why borrowing works** & **Alternate mental subtraction method**
2. Finish the subtraction exercise from #6.

Lesson 8
1. **Addition 4**
2. Complete the exercise “3 digit addition with carrying.”

Lesson 9
1. **Level 4 Subtraction**
2. Complete the exercise.

Lesson 10
1. Complete the exercise “**Addition and Subtraction Word Problems**.”
2. If this site is giving you problems, making a free account seems to fix that.

Lesson 11
1. **Negative Numbers Introduction**
2. Complete the exercise.

Lesson 12
1. **Ordering Negative Numbers**
2. Complete the exercise.
Lesson 13
1. Adding Negative Numbers and Adding integers with different signs
2. Complete the exercise.

Lesson 14
1. Adding/Subtracting negative numbers
2. Complete the exercise “Adding and Subtracting Negative Numbers.”

Lesson 15
1. Complete the exercise “Negative Number Word Problems.”

Multiplication and Division with Positive and Negative Numbers

Lesson 1 (Lesson 16)
1. Basic Multiplication and Multiplication 2: The Multiplication Tables
2. Complete the exercise.

Lesson 2 (Lesson 17)
1. Multiplication 3: 10,11,12 times tables
2. Click on the 11 and then test. Then go again and click on 12 and then test.

Lesson 3 (Lesson 18)
1. Multiplying by multiples of ten
2. Complete the exercise.

Lesson 4 (Lesson 19)
1. Division 1 and Division 2
2. Complete the exercise.

Lesson 5 (Lesson 20)
1. Dividing Whole Numbers and Applications 1
2. Complete the exercise “Division without Remainders.”

Lesson 6 (Lesson 21)
1. Multiplication : 3-digit times 1-digit number example and Multiplication 5: 2-digit times a 2-digit number
2. Complete the exercise.

Lesson 7 (Lesson 22)
1. Multiplication 6: multiple digit numbers.
2. Begin the exercise. You don’t have to finish all of them before you go on to #8.

Lesson 8 (Lesson 23)
1. Lattice Multiplication and Why Lattice Multiplication Works
2. Finish the exercise “Multiplying 3 Digits by 2 Digits.”
Lesson 9 (Lesson 24)
1. More long division and remainder examples
2. Complete the exercise.

Lesson 10 (Lesson 25)
1. Multiplication word problems and Division word problems
2. Complete the exercise.

Lesson 11 (Lesson 26)
1. Level 4 division
2. Begin the exercise. You don't have to finish the exercise before moving onto #12.

Lesson 12 (Lesson 27)
1. Partial Quotient Division and Partial Quotient Method of Division 2
2. Finish “Multi Digit Division.”

Lesson 13 (Lesson 28)
1. Answer the addition and subtraction word problems. (review)

Lesson 14 (Lesson 29)
1. Place Value 1 and Place Value 2 and Place Value 3
2. Complete the exercise.

Lesson 15 (Lesson 30)
1. Rounding Whole Numbers 1 and Rounding Whole Numbers 2 and Rounding Whole Numbers 3
2. Complete the exercise.

Lesson 16 (Lesson 31)
1. Multiplying Positive and Negative Numbers and Why a Negative Times a Negative is a Positive and Dividing Positive and Negative Numbers
2. Complete the exercise.

Lesson 17 (Lesson 32)
1. Learn about basic exponents. Here’s the video lesson.
2. Practice.

Number Properties

Lesson 1 (Lesson 33)
2. Explain and demonstrate the commutative law to a younger sibling (or someone else) using toys. (If I give you one car and one plane, you have a car and a plane. If I give you one plane and one car... If I give you a toy car two times, you have... If I give you two toy cars one time, you have...
Lesson 2 (Lesson 34)
1. Associative Law of Addition and Associative Law of Multiplication
2. If you need any more help on these, you can look at the first two sections on the page about the commutative and associative laws. Complete the questions 1 through 4 at the bottom of the page.

Lesson 3 (Lesson 35)
1. The Distributive Property and The Distributive Property 2 and The Distributive Property Exercise
2. Complete the exercise “Distributive Property.”

Lesson 4 (Lesson 36)
1. The number line and absolute value.
2. Complete the exercise “Finding Absolute Value.”

Lesson 5 (Lesson 37)
1. Complete the exercise “Comparing Absolute Values.”

Lesson 6 (Lesson 38)
1. Identity Property of 1 and Identity property of 1 (second example) and Identity property of 0
2. Demonstrate with toys and explain the identity property to a younger sibling (or someone).

Lesson 7 (Lesson 39)
1. Inverse Property of Addition and Inverse Property of Multiplication
2. Can you identify the number property? (Click on review for any you got wrong.)

Lesson 8 (Lesson 40)
1. Why Dividing by Zero is Undefined and Why Zero Divided by Zero is Undefined/Indeterminate and Undefined and Indeterminate
2. Explain this concept to your mother or homeschool teacher.

Lesson 9 (Lesson 41)
1. Answer the multiplication and division word problems. (review)

Lesson 10 (Lesson 42)
1. Introduction to Order of Operations and More Complicated Order of Operations Example
2. Complete the exercise. If you want to go for it, here’s a harder version with negative numbers.

Factors and Multiples

Lesson 1 (Lesson 43)
1. Prime Numbers
2. Read my notes below.
   - A prime number can't be divided evenly (no remainder) by any number except itself and the number 1. Example: 7/7=1, 7/1=7 You can't divide 7 evenly by any number other than itself and 1.
   - If it is even, then you can divide it by 2.
   - If it ends in 5 or 0, then you can divide it by 5.
   - If you can add up the digits and divide the sum by 3 or 9, then you can divide the whole number by 3 or 9. Example 69: 6 + 9 = 15 You can divide 15 by 3 so you can divide 69 by 3.

Lesson 2 (Lesson 44)
1. Recognizing Prime Numbers
2. Complete the exercise.

Lesson 3 (Lesson 45)
1. Recognizing Divisibility
2. Common Divisibility Examples
3. Complete the exercise “Divisibility Tests.”

Lesson 4 (Lesson 46)
1. Divisibility Intuition
2. Complete the exercise.

Lesson 5 (Lesson 47)
1. Finding Factors of a Number
2. Complete the exercise “Divisibility.”

Lesson 6 (Lesson 48)
1. Prime Factorization and Prime Factorization Exercise
2. Complete the exercise.

Lesson 7 (Lesson 49)
1. Least Common Multiple (LCM) Do NOT do the exercise on the video page.
2. Complete the exercise “Least Common Multiple.”

Lesson 8 (Lesson 50)
1. Greatest Common Divisor Do NOT do the exercise on the video page.
2. Complete the exercise “Greatest Common Divisor.”

Lesson 9 (Lesson 51)
1. Complete the “LCM and GCD word problems.” Pause the video. Read the problem and solve. Then watch the solution. Repeat for each problem.

Lesson 10 (Lesson 52)
1. The fundamental theorem of arithmetic
2. Complete the exercise.

Fractions
Lesson 1 (Lesson 53)
1. Numerator and Denominator of a Fraction
2. Complete the exercise.

Lesson 2 (Lesson 54)
1. Identifying Fraction Parts
2. Complete these two exercises. one two

Lesson 3 (Lesson 55)
1. Equivalent fractions
2. Complete the exercise “Equivalent Fractions.”

Lesson 4 (Lesson 56)
1. Equivalent Fractions Example
2. Read the page and answer the questions.

Lesson 5 (Lesson 57)
1. Comparing Fractions
2. Complete the exercise “Equivalent Fractions 2.”

Lesson 6 (Lesson 58)
1. Fractions in lowest terms
2. Read the page and answer the questions.

Lesson 7 (Lesson 59)
1. Comparing Fractions 2
2. Complete the exercise.

Lesson 8 (Lesson 60)
1. Ordering Fractions
2. Complete the exercise.

Lesson 9 (Lesson 61)
1. Proper and Improper Fractions and Mixed numbers and improper fractions
2. Read about proper and improper fractions as well as mixed numbers. Tell someone what each of those are and when you use them.

Lesson 10 (Lesson 62)
1. Converting Mixed Numbers to Improper Fractions
2. Answer the questions.

Lesson 11 (Lesson 63)
1. Changing an Improper Fraction to a Mixed Number
2. Complete the exercise.

Lesson 12 (Lesson 64)
1. Changing a Mixed Number to an Improper Fraction
2. Complete the exercise “Comparing Fractions 2.”

Lesson 13 (Lesson 65)
1. Comparing improper fractions and mixed numbers
2. Complete the exercise “Comparing Improper Fractions and Mixed Numbers.”

Lesson 14 (Lesson 66)
1. Adding Fractions with Like Denominators
2. Complete the exercise.

Lesson 15 (Lesson 67)
1. Subtracting Fractions Do NOT do the exercise on the video.
2. Complete the exercise “Subtracting Fractions with Common Denominators.”

Lesson 16 (Lesson 68)
1. Read about finding the least common multiple and answer the questions.

Lesson 17 (Lesson 69)
1. Finding Common Denominators
2. Read the page and answer the questions. Here’s a calculator for finding the least common multiple.

Lesson 18 (Lesson 70)
1. Adding Fractions with Unlike Denominators and Adding fractions (ex 1)
2. Complete the exercise.

Lesson 19 (Lesson 71)
1. Complete the exercise “Subtracting Fractions.”

Lesson 20 (Lesson 72)
1. Adding and subtracting fractions and Adding fractions with different signs.
2. Complete the exercise.

Lesson 21 (Lesson 73)
1. Complete the exercise, “Fraction Word Problems 1.”

Lesson 22 (Lesson 74)
1. Adding Mixed Numbers and Subtracting Mixed Numbers and Adding Mixed Numbers with Unlike Denominators
2. Read the page and answer the questions.

Lesson 23 (Lesson 75)
1. Complete the exercise “Fractions on a Number Line 1.”

Lesson 24 (Lesson 76)
1. Complete the exercise “Fractions on a Number Line 2.”

Lesson 25 (Lesson 77)
1. Complete the exercise “Fractions on a Number Line 3.”

Lesson 26 (Lesson 78)
1. Adding subtracting mixed numbers-0.5 (ex-1) and Adding subtracting mixed numbers-0.5 (ex-2)
2. Complete the exercise “Adding Subtracting Mixed Numbers 0.5.”

Lesson 27 (Lesson 79)
1. Adding subtracting mixed numbers-1 (ex-1) and Adding Subtracting Mixed Numbers-1 (ex-2)
2. Complete the exercise “Adding Subtracting Mixed Numbers 1.”

Lesson 28 (Lesson 80)
1. Adding Mixed Numbers Word Problem and Subtracting Mixed Numbers Word Problem
2. Complete the exercises: one two.

Lesson 29 (Lesson 81)
1. Multiplying Fractions
2. Complete the exercise.

Lesson 30 (Lesson 82)
1. Multiplying Mixed Numbers
2. Complete the exercise.

Lesson 31 (Lesson 83)
1. Multiplying Fractions and Mixed Numbers
2. Complete the exercise “Multiplying Mixed Numbers.”

Lesson 32 (Lesson 84)
1. Multiplying Fractions Word Problem
2. Complete the exercise.

Lesson 33 (Lesson 85)
1. Dividing fractions and Dividing Fractions Example
2. Complete the exercise.

Lesson 34 (Lesson 86)
1. Dividing Fractions Word Problem
2. Complete the exercise.

Lesson 35 (Lesson 87)
1. Reciprocal of a Mixed Number
2. Read this lesson and answer the “Your Turn” questions at the bottom of the page.

Lesson 36 (Lesson 88)
1. Dividing Mixed Numbers and Dividing Mixed Numbers and Fractions (This has some negative numbers. That’s just the same as dividing -4 by 2. The rules for multiplying and
dividing negative numbers still apply even though they are mixed numbers instead of whole numbers.)

2. Solve: 2 and 4/9 divided by 1 and 1/8. Convert the mixed numbers to improper fractions. Then multiply the first by the reciprocal of the second.

**Fractions, Decimals and Percents**

**Lesson 1 (Lesson 89)**
1. [Decimal Place Value](#) and [Decimal Place Value 2](#)
2. Complete the exercises “Decimal Place Value” and “Decimals in Written Form.”

**Lesson 2 (Lesson 90)**
1. [Decimals on a Number Line](#)
2. Complete the exercise.

**Lesson 3 (Lesson 91)**
1. [Rounding Decimals](#)
2. Complete the exercise.

**Lesson 4 (Lesson 92)**
1. [Estimation with Decimals](#)
2. Complete the exercise. (on CK12)

**Lesson 5 (Lesson 93)**
1. [Comparing Decimals](#)
2. Complete the exercise “Decimals on a Number Line 2.”

**Lesson 6 (Lesson 94)**
1. [Adding Decimals](#)
2. Complete the exercise.

**Lesson 7 (Lesson 95)**
1. Complete the exercise “Adding Decimals.”

**Lesson 8 (Lesson 96)**
1. Complete the exercise “Adding Decimals 2.”

**Lesson 9 (Lesson 97)**
1. [Subtracting Decimals](#)
2. Complete the exercise.

**Lesson 10 (Lesson 98)**
1. Complete the exercise “Subtracting Decimals.”

**Lesson 11 (Lesson 99)**
1. [Subtracting Decimals Word Problem](#) Do NOT do the exercise on the video.
2. Complete the exercise “Adding and Subtracting Decimal Word Problems.”

Lesson 12 (Lesson 100)
1. Multiplying a Decimal by a Power of 10 and Dividing a Decimal by a Power of 10
2. Complete the exercise.

Lesson 13 (Lesson 101)
1. Multiplying Decimals and Multiplying Decimals 3
2. Complete the exercise.

Lesson 14 (Lesson 102)
1. Dividing Decimals 2.1
2. Complete the exercises in the article “Dividing Decimals by powers of 10.”

Lesson 15 (Lesson 103)
1. Dividing decimal
2. Complete the exercise.

Lesson 16 (Lesson 104)
1. Dividing Decimals
2. Complete the exercise “Dividing Decimals.”

Lesson 17 (Lesson 105)
1. Decimals and Fractions and Converting Fractions to Decimals Example
2. Complete the exercise.

Lesson 18 (Lesson 106)
1. Converting fractions to decimals (ex1) and Converting fractions to decimals (ex2)
2. Go to this lesson and complete the “Your Turn” questions at the bottom of the page.

Lesson 19 (Lesson 107)
1. Converting decimals to fractions 1 (ex 1) and Converting decimals to fractions 1 (ex 2) and Converting decimals to fractions 1 (ex 3)
2. Practice writing decimals as fractions.

Lesson 20 (Lesson 108)
1. Converting decimals to fractions 2 (ex 1) and Converting decimals to fractions 2 (ex 2)
2. Go to this lesson and complete the “Your Turn” questions at the bottom of the page.

Lesson 21 (Lesson 109)
1. Converting Fractions to Repeating Decimals
2. Complete the exercise.

Lesson 22 (Lesson 110)
1. Describing the Meaning of Percent and Describing the Meaning of Percent 2
2. Do NOT do the exercise on the videos. Go to this lesson and answer the review questions at the bottom of the page.
Lesson 23 (Lesson 111)
1. Converting decimals to percents (ex 1) and Converting decimals to percents (ex 2)
2. Complete the exercise “Converting Decimals to Percents.”

Lesson 24 (Lesson 112)
1. Read this lesson.
2. Complete the exercise “Converting Percents to Decimals.”

Lesson 25 (Lesson 113)
1. Points on a number line
2. Go to the video and complete the exercise.

Lesson 26 (Lesson 114)
1. Ordering numeric expressions Go to the video.
2. Then read about ordering decimals and complete the “Your Turn” exercises.

Lesson 27 (Lesson 115)
1. Representing a number as a decimal, percent, and fraction and Representing a number as a decimal, percent, and fraction 2
2. Complete the exercise.

Lesson 28 (Lesson 116)
1. Identifying Percent Amount and Base
2. Read this lesson and answer the “Your Turn” questions.

Lesson 29 (Lesson 117)
1. Solving Percent Problems and Solving Percent Problems 2
2. Complete the first six problems.

Lesson 30 (Lesson 118)
1. Solving Percent Problems 3 and Growing by a percentage
2. Complete the exercise.

Ratios and Proportions

Lesson 1 (Lesson 119)
1. Introduction to Ratios
2. Now practice.

Lesson 2 (Lesson 120)
1. Ratios as Fractions in Simplest Form
2. Complete this review exercise of “Simplifying Fractions.”

Lesson 3 (Lesson 121)
1. Simplifying Rates and Ratios
2. Play to practice.

Lesson 4 (Lesson 122)
1. Complete the ratio word problems.

Lesson 5 (Lesson 123)
1. Understanding Proportions
2. Read this lesson, finding an unknown in a proportion. Answer the questions.

Lesson 6 (Lesson 124)
1. Remember that you are supposed to work on each lesson until you are proficient, until you get it. Don’t move on if you are stuck. Give it another try the next day.

Lesson 7 (Lesson 125)
1. Finding an unknown in a proportion
2. Complete the exercise. (Write your answers as fractions or mixed numbers.)

Lesson 8 (Lesson 126)
1. Finding Unit Rates and Finding Unit Prices
2. Complete the exercise on units.

Lesson 9 (Lesson 127)
1. Take a notepad to the grocery store. Write the price and unit price as well as the measurements (eg. 4 ounces) for five different products. You'll find the info on the tag. The unit price is written small. At home see if you can take the product price and come up with the same unit price as the store.

Lesson 10 (Lesson 128)
1. Unit conversion
2. Read the page on converting units and answer the questions.

Lesson 11 (Lesson 129)
1. Converting units of length
2. Read the page and answer the questions.

Lesson 12 (Lesson 130)
1. Measure something in centimeters and inches. Write them as a proportion.
2. Measure something just in inches and use the proportion to figure out what the measurement is in centimeters.
3. Now measure it in centimeters and see if you were right. If you don’t know what U.S., Customary and Metric units are then watch this.

Lesson 13 (Lesson 131)
1. Conversion between metric units and Converting within the metric system
2. Make a chart for milliliters, liters, kiloliters; millimeters, centimeters, meters and kilometers; milligrams, grams, kilograms. Your chart should show how many of each are in the other.
Lesson 14 (Lesson 132)
1. [Converting Gallons to quarts pints and cups](#)
2. Make a chart for gallons, quarts, pints and cups that shows how many are in each other.

Lesson 15 (Lesson 133)
1. [Converting pounds to ounces](#)
2. Find out how much you weighed when you were born. Figure out how much you weighed in ounces.

Lesson 16 (Lesson 134)
1. [Comparing Celsius and Fahrenheit temperature scales](#) 0 (zero) degrees Celsius is the same temperature as 32 degrees Fahrenheit. 100 degrees Celsius is the same temperature as 212 degrees Fahrenheit.
2. Can you figure out how to get from one to the other? After you’ve thought about it, find the formula online or on the video. Plug in 0 and 100 and see if you get 32 and 212.

Lesson 17 (Lesson 135)
1. [Converting Farenheit to Celsius](#)
2. Take today’s temperature in Fahrenheit and figure out today’s temperature in Celsius.

**Exponents**

Lesson 1 (Lesson 136)
1. [Understanding Exponents](#) and [Raising Numbers to the 1st and 0th Power](#).
2. Complete the [exercise](#).

Lesson 2 (Lesson 137)
1. [Patterns in Zeros](#)
2. Complete the [exercise](#).

Lesson 3 (Lesson 138)
1. [Exponent Rules Part 1](#) and [Exponent Rules Part 2](#) and [Exponents involving Quotients](#)
2. Complete the [exercise](#).

Lesson 4 (Lesson 139)
1. [Understanding Square Roots](#)
2. Complete the [exercise](#).