

Table of Contents

Note: The letters and numbers in parentheses following the activity name reference specific Common Core State Standards for Mathematics addressed by the activity.

- 1 Order of Operations
- 2 Word Problems Using Whole Numbers Only
- 3 Selecting a Prime Number from a List of Whole Numbers
- 4 Writing a Composite Number as a Product of Prime Factors
- 5 Finding the Least Common Multiple of Two Numbers Expressed as a Product of Prime Factors (6.NS 4)
- 6 Finding the Least Common Multiple of a List of Three or More Numbers (6.NS 4)
- 7 Adding Simple Fractions in Horizontal Form (5.NF 1)
- 8 Adding, Subtracting, Multiplying, and Dividing Fractions
- 9 Conversions Involving Actual Distances and Lengths on a Map
- 10 Adding or Subtracting Denominate Numbers
- 11 Finding a Missing Term to Make Two Equivalent Fractions
- 12 Finding the Perimeters of Figures on a Grid (7.G 1)
- 13 Finding the Areas of Figures on a Grid (7.G 1)
- 14 Reading Lengths to Scale
- 15 Conversions Involving Common and Metric Units
- 16 Adding and Subtracting with Decimals (6.NS 3)
- 17 Multiplying and Dividing with Decimals (6.NS 3)
- 18 Rounding Whole Numbers and Decimals (5.NBT 4)
- 19 Finding Arithmetic Means (6.SP 5)
- 20 Expressing Fractions as Percents
- 21 Word Problems Involving Percents (7.RP 3)
- 22 Word Problems Involving Fractions, Decimals, and Percents (7.RP 3)
- 23 Mental Computation
- 24 Finding the Greatest Number in a List
- 25 Finding the Next Number in a Given Sequence
- 26 Finding the Opposite of a Number or Expression (6.NS 6)
- 27 Identifying Coordinates of Points on a Grid (6.NS 6)
- 28 Interpreting Linear Graphs (6.NS 6)
- 29 Changing the Expanded Form of a Number to Standard Form (5.NBT 3)
- 30 Adding Signed Numbers Using a Number Line (7.NS 1)
- 31 Adding Signed Numbers (7.NS 1)
- 32 Subtracting Signed Numbers (7.NS 1)
- 33 Multiplying Signed Numbers (7.NS 2)
- 34 Dividing Signed Numbers (7.NS 3)
- 35 Solving Simple Equations Using Integers Only
- 36 Writing Algebraic Expressions from Word Descriptions (6.EE 2)
- 37 Evaluating Algebraic Expressions

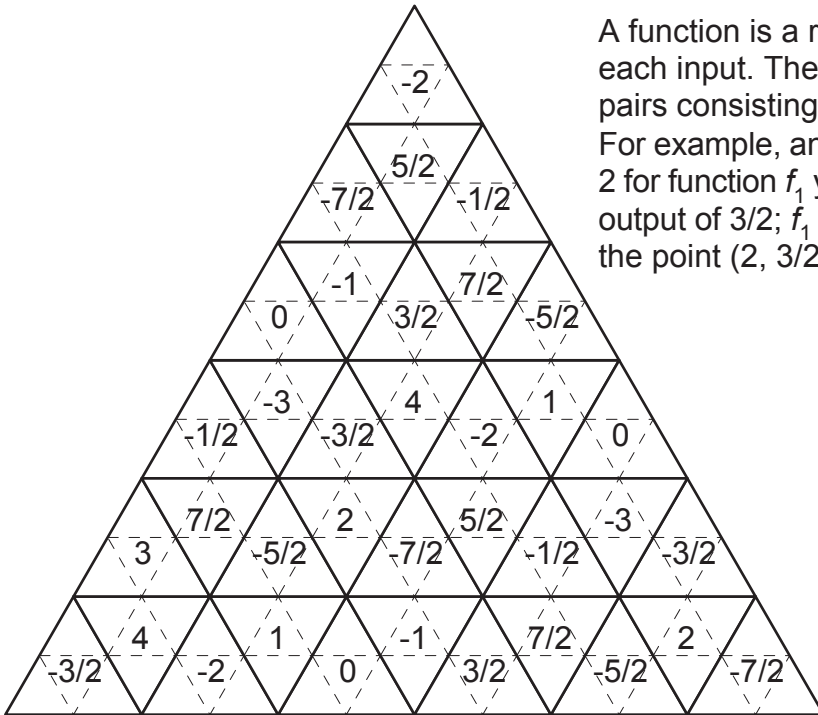
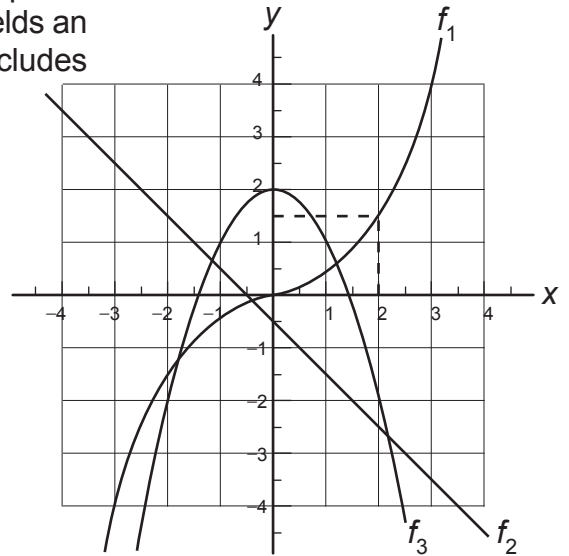
- 38 Algebraic Word Problems (*7.EE 4*)
- 39 Counting Rectangles, Squares, Triangles, and Trapezoids
- 40 Probability
- 41 Rational Approximations of Irrational Numbers (*8.NS 2*)
- 42 Adding, Subtracting, Multiplying, and Dividing using Scientific Notation (*8.EE 4*)
- 43 Function Basics (*8.F 1*)
- 44 The Pythagorean Theorem and the Distance Between Two Points (*8.G 8*)

Activity 43

Name _____

A function is a rule that assigns exactly one output to each input. The graph of a function is the set of ordered pairs consisting of an input (x) and an output (y).

For example, an input of 2 for function f_1 yields an output of $3/2$; f_1 includes the point $(2, 3/2)$.



For an input of $5/2$, what is the output of f_1 ?



For an input of 2, what is the output of f_3 ?



For an input of 3, what is the output of f_1 ?



For an input of 0, what is the output of f_2 ?



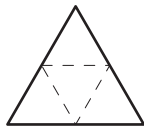
For an input of 1, what is the output of f_2 ?



For an input of 3, what is the output of f_2 ?



What input results in an output of $-5/2$ for function f_1 ?



What input results in an output of -2 for function f_2 ?



What input results in an output of 2 for function f_3 ?



What negative input results in an output of 1 for function f_3 ?



What input results in an output of $5/2$ for function f_2 ?



What input results in an output of -4 for function f_2 ?



Which function, 1, 2, or 3, includes the point $(-2, -2)$?



Which function, 1, 2, or 3, includes the point $(0, 0)$?



Which function, 1, 2, or 3, includes the point $(1/2, -1)$?