

# Linear Art

## 8th Grade Math & Visual Arts

### CORE SUBJECT AREA

Math

### ART FORM + ELEMENTS

Visual Art  
Drawing  
Line  
Proportion

### MSCCR STANDARDS

8.EE.7 Solve linear equations in one variable  
a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form  $x=a$ ,  $a=a$ ,  $a=b$  results.

### MSCCR CREATIVE ARTS STANDARDS

Cr1.1.8 Generate and conceptualize artistic ideas and work.  
a. Document early stages of the creative process visually and/or verbally in traditional or new media.

### DURATION

Will need 1 day, after solving equations has been taught.

### OBJECTIVES

Students will be able to solve equations that have one solution, no solution, or an infinite number of solutions.

### MATERIALS NEEDED

Face sheet, math problem sheet, pencil, colored pencil.

### LESSON SEQUENCE

Students will solve an equation to illustrate one solution. ex:  $8x - 1 = 23 - 4x$ . If  $x=2$  we end up with a true statement;  $15=15$ .

Worksheets and other materials will be passed out and students will begin independent work.

1. Students will do bellringer problems.
2. The class will then solve the first equation as a whole group to remind students of the idea that in their experience, an algebraic equation typically has only one solution.
3. The teacher will draw different types of lines and give their art descriptions.
4. Students will then solve the 12 equations and draw the corresponding facial features for the given solution on the blank face provided.
5. Students may then color their faces and facial features to their liking.

### SOURCES

Betterlessons.com

### TIPS + FREQUENTLY ASKED QUESTIONS

Students will begin overusing "no solutions" and "infinite solutions," so this assignment will engage them, and they will want to do well. This should be used as a informal assessment, after you've taught the standard.