**Adding Polynomials**

**Assignment**

**Objective:** To demonstrate an understanding of combing like terms and adding polynomials.

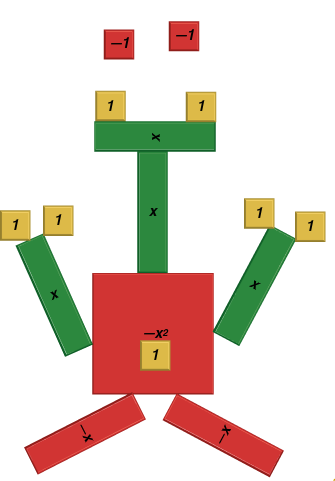
**How to do it:**

1. Go to <http://www.glencoe.com/sites/common_assets/mathematics/ebook_assets/vmf/VMF-Interface.html>
2. Use algebra tiles to create a Christmas picture.
3. Show all the tiles algebraically using addition.
4. Cancel out zero pairs, combine like terms and show the simplified polynomial that represents the picture.

**Performance-Based Assessment:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Beginning** | **Developing** | **Accomplished** | **Exemplary** |
| **Picture** | Three or more components are missing | Two components are missing but the rest are fully included | One components is missing but the rest are fully included | All components are correctly included – detailed and thorough |
| - Use a minimum of one of each algebra tile  - Combine the algebra tiles to create a picture  - Show an algebraic addition statement that represents the tiles  - Show the cancellation of zero pairs  - Combine like terms to show the simplified version of the polynomial represented by the picture | | | | |





**Polynomial Art**

~~-1 + -1 + 1 + 1~~ ~~+ x + x~~ + x +1 + 1 + 1 + 1 + x + x + (-x2) + 1 + ~~(-x) + (-x)~~

= -x2 + 2x + 5