Mr. Gmerek

Algebra 2

Problem Set 1.2

1. **Exponential form** of a number is a short hand way to write repeated multiplication. Give an example of a number written in exponential form, write the number in expanded form, and find its value.
	1. Identify each of the numbers (by name) used in exponential form.
	2. A cube has length of 13 inches. Write its volume in exponential form.
2. Evaluate:
	1. 
	2. 

* 1. How do #2a and #2b differ?
1. Why must we use **order of operations**?
	1. What is the order of operations?

* + 1. What exceptions exist (there are 2)? (Hint: Try 4 – 7 + 6. Can you get two different answers? Which one is correct?)

* 1. Evaluate:
		1. 
		2. 
		3. 
		4. -4 + 2(-2 + 5)
1. Evaluate -3x² - 5x + 7 when x = -2.
2. Write a variable expression to represent the following:
	1. Chuck’s hourly wage is $3.00 more than what Grant makes per hour.
	2. An elevator operator weighs 180 pounds. He is loading boxes onto the elevator that weigh 25 pounds each and crates that weigh 77 pounds each. What is the total weight on the elevator?

* 1. If Bob loads 15 boxes and 17 crates, how much weight is on the elevator?
1. Define:
	1. **term**
	2. **coefficient**
	3. **like terms**
	4. **constant**
2. Define distribute (in your own words).
	1. What is the **distributive property**?
3. Simplify the following:
4. 3(x + 7)
5. (t – 9)11

1. -17(5 – d)
2. (g + 18)(-3)
3. Simplify:
4. 9(v + 5) - 14v
5. 4 – 3(z – 13)
6. 7(w + 12) + (9 + w)6
7. 7(w + 12) + (9 + w)(-6)
8. x² - 5(x + 4) + 12x