**Combining “Like” Snacks Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Your snack bag contains the following: 7 Red Hots, 15 Smarties, 6 pretzels, and 8 Cheese-Nips.**

Using the snack bag, model the following problems.

1. 3 Cheese- Nips + 2 pretzels + 2 Cheese- Nips + 3 pretzels = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. 4 Red Hots + 5 Smarties + 2 Red Hots + 3 Smarties = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 2 pretzels + 4 Red Hots + 1 pretzel = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 5 Cheese- Nips + 3 pretzels + 2 Smarties + 2 pretzels = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. 4 pretzels + 6 Cheese- Nips – 2 pretzels – 1 Cheese- Nips = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use these abbreviations for the rest of the problems:

c = Cheese-Nips r = red hots p = pretzels s= Smarties

1. 4r + 2p + 2r + 3p + 2s = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. 5c + 5s + 3c + 8s = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 5p + p + 6c + 2c + 8s + 2r = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 3r + 2r + 3c + r + 2c + 2p = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. 7r + 10s– 2r – 4s = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Try these problems with the distributive property. Use your snacks if you need to.

1. 4(c + r) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. 2(3s – 4c) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 3(s + p) + 2(s – 2p)= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 5(r – s)= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. 2 (3r + 2c + 5s + p) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **Eat your snacks while working these problems.** Now try these problems with different variables. Don’t forget to use your properties to simplify. Also, don’t forget to use your rules for operations with integers. Show all work!!!!!

1. 3(x + 5y) + 2x + 6y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. 12a + 5(b - 8b) + 11(a + 6c) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 8t – 2t + 14r + 2r – 11r = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. -16w + 5g – 9w + 6g – 2g + 7d = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. -17m + 8n + 10m - 5n + 13k = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_