Solution Guide for Chapter 7

Here are the solutions for the "Doing the Math" exercises in *Kiss My Math*!

DTM from p.105

2. $9j + 3j – 5j = ?$

First, we'll change the subtraction to "adding a negative" and get: $9j + 3j + (–5j)$. Next, we can combine these terms by combining their coefficients: $9 + 3 + (–5)$. Combining just the first two terms, we get $12 + (–5)$, and finally $12 + (–5) = 7$. The sum of *j*'s coefficients is 7, so that means our answer is: $9j + 3j – 5j = 7j$

Answer: **7*j***

3. $11c - 4c - (-7c) = ?$

Let's change that double negative to a plus sign, and then the subtraction in front of the $4c$ to "adding a negative" so we get: $11c + (-4c) + 7c$. Now we're ready to combine all of c's coefficients: $11 + (-4) + 7 = 7 + 7 = 14$. This means that $11c - 4c - (-7c) = 14c$.

Answer: **$14c$**

4. $0.8y - (-0.3y) - 0.9y = ?$

Let's change that double negative to a plus sign, and then the subtraction in front of the $0.9y$ to "adding a negative" so we get $0.8y + 0.3y + (-0.9y)$. Now we're ready to combine y's coefficients: $0.8 + 0.3 + (-0.9) = 1.1 + (-0.9) = 0.2$.

This means that $0.8y - (-0.3y) - 0.9y = 0.2y$

Answer: **$0.2y$**

5. $\frac{1}{2}z - \frac{1}{4}z = ?$

This one's pretty easy; first we can rewrite the subtraction to adding a negative and get: $\frac{1}{2}z + (-\frac{1}{4}z)$. Next we just combine z's coefficients: $\frac{1}{2} - \frac{1}{4} = \frac{1}{4}$. So that means:

$\frac{1}{2}z + (-\frac{1}{4}z) = \frac{1}{4}z.$

Answer: $\mathbf{\frac{1}{4}z}$

6. $7t - 2t - (-t) + 10 = ?$

As usual, first we'll write the double negative as a plus sign, and then the subtraction in front of the $2t$ as "adding a negative": $7t + (-2t) + t + 10$. Next, let's write in that sneaky coefficient of "1": $7t + (-2t) + 1t + 10$. Time to combine coefficients – but wait – keep an eye on that constant, 10: We can only combine the variable terms together, so of course we won't include the 10 in our combining of coefficients: $7+ (-2) + 1 = 5 + 1 = 6$. So remembering to add the 10 back on, our answer is: $7t + (-2t) + 1t + 10 = 6t + 10$.

Answer: **$6t + 10$**