Solution Guide for Chapter 1

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

DTM from p.4

2. What's the worst tasting mint? The *most* negative one: –12, so that one has the least value. Next on the list would be –5, then Mr.Linteger, 0, and finally, the only positive number must be the one with the most value. Answer: **–12, –5, 0, 3**.

3. What's the number with the least value? Well, what's the worst tasting mint? The *most* negative one: –10, so that one has the least value. Next on the list would be –7, and then –4. The only positive number, 6, must be the one with the greatest value.

Answer: **–10, –7, –4, 6**

4. What's the worst tasting mint? The *most* negative one: –8, so that one has the least value. Next on the list would be –1, and then the two positive numbers are easy to put in order. Answer: **–8, –1, 2, 7**

DTM from p.9

2. 3 – 5 + 4 = ?

First rewrite subtraction as "adding negatives": 3 + (-5) + 4, then combine, left to right. Combining the first two gives us: 3 + (-5) = -2. Then we combine -2 + 4 = 2.
Answer: **2**.

3. –3 – 5 + 4 = ?

First rewrite subtraction as "adding negatives": –3 + (–5) + 4. Then combine the first two terms: –3 + (–5) = -8. Then we combine: –8 + 4 = –4.

Answer: **–4**

4. –3 – 5 – 4 = ?
First rewrite subtraction as "adding negatives": –3 + (–5) + (–4). Combining the first two terms, we get: –3 + (–5) = –8. Then we finish it by combining this with the last term: –8 + (–4) = –12.
Answer: **–12**

DTM from p.12

2. 2 – 4 – (– 8) = ?

We first rewrite double negatives as a plus sign, and then rewrite subtraction as "adding negatives": 2 + (–4) + 8. Then, combining the first two terms, we get: 2 + (–4) = -2.

Finally, we combine this with our last term: -2 + 8 = 6.

Answer: **6**

3. $-3-(-7)=?$

We first rewrite double negatives as a plus sign (this time there's no subraction): $-3+7$, and we combine them: $-3+7=4$.

Answer: **4**

4. $1-(-2)-1=?$

We first rewrite double negatives as a plus sign, and then rewrite subtraction as "adding negatives": $1+2+(-1)$, and we combine the first two terms: $1+2=3$. And now we combine that with the last term: $3+(-1)=2$.

Answer: **2**

5. $-1-1-(-1)-(-1)=?$

We first rewrite double negatives as a plus sign, and then rewrite subtraction as "adding negatives": $-1+(-1)+1+1$. Combining the first two terms, we get: $-1+(-1)=-2$. Now combining this with the third term, we get: $-2+1=-1$. Finally, combining this with the last term, we get: $-1+1=0$.

Answer: **0**

DTM from p.16-17

2. $-\frac{1}{2}-(-3)-\frac{1}{2}=?$

We first rewrite double negatives as a plus sign, and then rewrite subtraction as "adding negatives": $-\frac{1}{2}+3+(-\frac{1}{2})$. Next we'll combine the first two terms. To do that, we can rewrite the "3" as a fraction with a denominator of 2. $3=\frac{3}{1}=\frac{3\times\mathbf{2}}{1\times\mathbf{2}}=\frac{6}{2}$. Now we can rewrite the first two terms like this: $-\frac{1}{2}+\frac{6}{2}=\frac{-1+6}{2}=\frac{5}{2}$. Finally, we can combine this with our last term: $\frac{5}{2}+(-\frac{1}{2})=\frac{5+(-1)}{2}=\frac{4}{2}=2$.

Answer: **2**

3. 43.3 – 56.9 = ?

In this case, we can tell answer will have to be negative, so we can just do the reversed subtraction problem: 56.9 – 43.3 and remember to stick a negative sign on it afterwards.

Answer: **–13.6**

4. 43.3 – 56.9 + 2.6 = ?

We already know from problem #3, that 43.3 – 56.9 = –13.6, so we can rewrite this problem as: –13.6 + 2.6. Combining these, we get: –11.

Answer: **–11**

5. $\frac{5}{2} - \frac{7}{2} - (-0.5) + 0.5 = ?$

Hm, looks sort of complicated, so let's definitely start by rewriting double negatives as a plus sign, and subtraction as "adding negatives": $\frac{5}{2} + (-\frac{7}{2}) + 0.5 + 0.5$, now we can combine the first two terms: $\frac{5}{2} + (-\frac{7}{2}) = \frac{5+(-7)}{2} = \frac{-2}{2} = -1$. Now our problem looks like this: –1 + 0.5 + 0.5. Combining the first two terms, we get: –1 + 0.5 = –0.05, right? And finally we combine this with the last term: –0.05+ 0.5 = 0.

Answer: **0**