Math 310 - Dr. Miller - Weekly Assessment #3, Spring 2024 - **Due by 4pm Friday, Feb. 2 in print or WA # DropBox**

Each WA is worth 10 points. Work right on these pages, then scan and upload or give to me in print. You can work together or see a tutor, but NEVER copy. This WA is for a grade, so dishonesty or cutting corners may earn a 0 for all involved.

1. *[2 pts - 0.5 each]* Fact Families using integers are not automatic for adults, and sometimes we tangle them with Fact Families using whole numbers. Yet by definition, in a Fact Family all number sentences MUST use the same numbers. Answer each question below with "Yes" or "No." No explanation is required, though you can include one for your own sense-making. (Identifying exactly what numbers are the minuend, subtrahend, etc., off to the side on their own, might help.)

   (a) Are $5-(-1)=6$ and $5+1=6$ in the same Fact Family?

   (b) Are $5-(-1)=6$ and $5+(-6)=-1$ in the same Fact Family?

   (c) Are $5-(-1)=6$ and $5-6=-1$ in the same Fact Family?

   (d) Are $5-(-1)=6$ and $6-1=5$ in the same Fact Family?

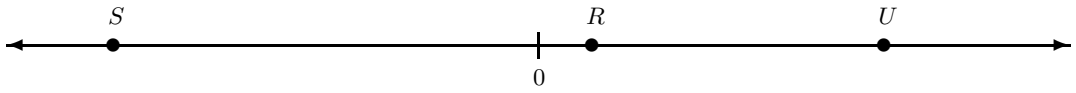
2. *[1 pt]* Write the complete Fact Family that contains the number sentence $5-(-1)=6$. (If you're stuck, try some scratchwork with letters, and then carefully determine what each letter is worth in the number sentence you're given. Or identify off to the side exactly what the minuend, subtrahend, etc., are, as above. See me or the MAC tutors for help if you get stuck.) Clearly indicate your final answers.

3. *[1 pt]* Write the complete Fact Family that contains the number sentence $5\times(-4)=20$.

4. (a) *[1 pt]* Clearly describe the two ways we discussed for thinking about absolute value.

(b) *[0.5 pt]* List two positive integer values and two negative integer values for x that would make $|x| \geq 3$.

5. *[4.5 pts - 1.5 each]* Consider the number line below:



Fill in each blank below with the symbol $>$, $<$, or $=$, justifying your choice with a sentence. Refer to the sample solutions in D2L Content (the Solutions sub-module) for acceptable formats.

(a) $U \times (-S)$____0

(b) $R + S$____0

(c) $|S|$____$|R|$