Math 310 - Dr. Miller - Weekly Assessment #2, Spring 2024 - **Due in Mobius by 4pm Friday, Jan. 26**

Each WA is worth 10 points. Work right on these pages, then scan and upload in the segments indicated on Mobius. 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. *[2.5 pts - 0.5 each]* In each part below, write a complete number sentence - using whole numbers or (positive) fractions - that satisfies the description, IF POSSIBLE. If not possible, explain why not. The parts are separatest.

   (a) 8 is a quotient and 3 is a divisor.

   (b) 5 is a subtrahend and exactly two numbers are the same.

   (c) 7 is a product, and all numbers are different.

   (d) The addends differ by 1.

   (e) The minuend is smaller than the difference.

2. *[2 pts - 1 each]* Fact Families using whole numbers are so automatic for adults that we can have trouble understanding why children struggle with them. This problem removes our memorized info, to better think about the way kids have to put Families together when they first learn. Obviously, kids will NOT write algebra, but they WILL experience the same sense of "How are these things related?" that we get below.

   (a) Write all of the other algebra sentences in the same "Fact Family" as $a - t = 3$.

   (b) Write all of the other algebra sentences in the same "Fact Family" as $x \div \frac{1}{2} = y$.

3. *[3 pts - 1 each]* For each word problem below, give the name of the scenario it illustrates.

   (a) Diane has 18 flowers; Gina has 13. How many more does Diane have?

   (b) Diane's store display has three rows of sandwiches with 12 sandwiches per row. How many sandwiches are there together?

   (c) Elroy eats the same number of muffins every morning. If he ate 16 muffins over the past 8 days, how many muffins does he eat every day?

4. *[1.5 pts - 0.5 each]* Give the full name of the property demonstrated in each part below.

   (a) $(6+3)+5\cdot 4 = 6+(3+5\cdot 4)$

   (b) $(6+3)+5\cdot 4 = (6+3)+4\cdot 5$

   (c) $(6+3)\cdot 1+5 = (6+3)+5$

5. *[1 pt]* Complete the number sentence below so that it demonstrates the Zero Property of Multiplication.

$$5(4+3)+(2+1)+0 = \underline{\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad}$$