Math 310 - Dr. Miller - Weekly Assessment #2, Fall 2024

TR Students: due IN CLASS on Thursday, 9-5-2024
MW Students: due in special DropBox on D2L by 3pm Friday, 9-6-2024

Each WA is worth 10 points. Work right on these pages (MW students, you can work on your own paper if desired). 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. *[3 pts - 0.5 or 1 pt each]* In each part below, write a complete number sentence - using strictly WHOLE NUMBERS and/or POSITIVE fractions - that satisfies the description, if possible. If NOT possible using only those types of numbers, just say so. The parts are all separate (they can have different answers).

   (a) 9 is a product and all numbers are different.

   (b) One of the addends is 17 minus the other.

   (c) The quotient is larger than the dividend.

   (d) The minuend is 8 and the difference is 15.

2. *[1 pt]* Write the complete Fact Family that includes the number sentence $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$.

3. *[1 pt]* In class, we saw how Fact Family thinking can give one explanation for why $5 \div 0$ is impossible. Use similar thinking to clearly explain why $0 \div 5$, on the other hand, DOES have an answer.

4. (a) *[0.5 pts]* Write a Fact Family that uses the numbers 12, 0, and your choice of a third whole number.

   (b) *[0.5 pts]* Now write a DIFFERENT Fact Family that uses 12, 0, and a third whole number. (So you have to pick a different third number than what you chose earlier.

5. *[3 pts - 0.5 each]* For each word problem below, give the name of the scenario it illustrates. You do NOT need to include any other info in your answer.

   (a) Maria sells subs made your choice of one kind of meat and one kind of cheese. If she has 3 kinds of meat available and 5 kinds of cheese, how many different sub creations are possible?

   (b) Darren worked $17\frac{1}{2}$ hours at last year's music festival, and he'll work 20 hours this year. How many more hours will he be working this year?

   (c) The club has 190 signatures on their petition, but they need to reach 350 to be allowed to submit it. How many more signatures do they have to go?

   (d) Gareth is giving 500 scoops of ice cream away in baby cones that hold 1/2 a scoop each. How many cones can Gareth give away?

   (e) Suri walks the same distance every day. Over the last 30 days, she walked 15 miles. How far did she walk each day?

   (f) Romanov lost 15 pounds over the summer. They weighed 247 pounds at the start; how much did they weigh at the end of the summer?

6. *[1 pt]* (See the extra, non-required practice listed on the web for similar tasks.) Make up an original word problem that uses the partitioning scenario for the computation $6 \div 12$ and also give the answer to your problem.