Note: Before completing this assignment, you need to complete the reading, **“Studying and Learning Math.”**

1. What is your biggest challenge in studying for this course?
2. Name two points from the reading that you think could help you make better use of your study time.
3. List the different types of studying and name two strategies you would use for each type.

1. There are $7\frac{1}{3}$ pies left in the pie case. The manager has a fresh supply coming in and she wants to sell the rest of the pies in a hurry, so she offers a deal: Buy one super slice (1/3 of a pie) and get a second super slice free. How many of these specials does she need to sell to get rid of all the pies?

**Problem Solving Tip:** Math teachers know from experience that operations with fractions are some of the most difficult skills for students to remember. We also hear many complaints from faculty in other subjects that students don’t know how to work with fractions. So it really is important for you learn the skill. Students often memorize rules or shortcuts for operations with fractions. These are very useful for developing *fluency* which means the ability to do problems quickly, but memorized rules can also trip you up because you forget them or get them confused with other rules. You can still use the rules if you also check yourself. One good way to do this is estimation. A very general estimate will signal to you whether you are doing the operation correctly. This is especially helpful for multiplication and division. You can also predict whether the result of a calculation will be a whole number or will have fractional parts and whether it will simplify based on the factors of the denominator and numerator. The more you predict about the problem ahead of time, the more likely you will catch errors.

1. **For each problem below, circle all of the statements that are correct estimates.**

|  |  |  |  |
| --- | --- | --- | --- |
| $$\frac{5}{8}∙245$$ | Product will be… |  |  |
| > 245 | < 245 | > one-half of 245 |
| < than 5/8 | a whole number | < one-half of 245 |
| $$245∙\frac{7}{20}$$ | Product will be… |  |  |
| > 245 | Product will be < 245 | > one-half of 245 |
| < than 7/20 | a whole number | Able to be reduced |
| $$245÷\frac{7}{20}$$ | Quotient will be… |  |  |
| > 245 | < 245 | > one-half of 245 |
| < than 7/20 | a whole number | Able to be reduced |
| $$\frac{1}{8}÷\frac{3}{4}$$ | Quotient will be… |  |  |
| > 1/8 | < 1/8 | > ¾ |
| Quotient will be < 1 | a whole number | Able to be reduced |
| $$\frac{14}{3}+\frac{4}{5}$$ | Sum will be… |  |  |
| > 1 | < 1 | > 6 |
| > 5 | > 4 |  |

**Remember that fractions are one of the four topics in the Foundational Skills Policy. If you do not remember this policy, you should review it. You must show mastery on these areas in order to pass the course REGARDLESS of your overall grade.**

**Proportional Tiles (Percent Version) –**refer back to the activity from Day 5 of class for pictures of all the tiles.

1. If = 100%, what is ?
2. If = 100%, what is ?
3. If rhombus = 10%, then trapezoid = \_\_\_\_\_\_\_\_\_\_\_.
4. If rhombus = 10%, then hexagon = \_\_\_\_\_\_\_\_\_\_.
5. If hexagon = 120%, then triangle = \_\_\_\_\_\_\_\_\_\_.