

Math5900 Homework #7

Make sure your work is neatly presented. Show all your work, with thorough explanations.

Arithmetic Operations

1. Use three different methods to illustrate each of these operations.

- (a) $479 + 135$
- (b) $610 - 436$
- (c) 121×63
- (d) $309 \div 25$

2. Use rectangular cakes to illustrate the following operations.

- (a) $\frac{3}{7} + \frac{1}{3}$
- (b) $\frac{4}{5} - \frac{1}{2}$
- (c) $\frac{2}{3} \times \frac{1}{5}$
- (d) $\frac{9}{10} \div \frac{1}{6}$

3. Write a story problem that would require each of these computations.

- (a) $\frac{3}{7} + \frac{1}{3}$
- (b) $\frac{4}{5} - \frac{1}{2}$
- (c) $\frac{2}{3} \times \frac{1}{5}$
- (d) $\frac{9}{10} \div \frac{1}{6}$

4. Using $245 \div 7$,

- (a) Write an partitive example.
- (b) Write a measurement example.

More on Fractions

5. Mary was making a skirt. She had $3\frac{2}{5}$ yards of material. She used $\frac{3}{4}$ of the material for the main part of the skirt, and then she used $\frac{2}{3}$ of what was left for a belt. How much material was left?

6. You gave a student a large sheet of red construction paper to make paper toys. If your student used $\frac{2}{7}$ of the sheet for a cart and $\frac{3}{5}$ of the sheet for a tent, what fraction of the sheet of paper was left?
7. Five rectangular cakes are to be divided into portions with each portion being $\frac{3}{5}$ of a cake. How many portions are possible?
8. Kaite can mow $\frac{3}{5}$ of the lawn in $\frac{1}{4}$ of an hour. How long will it take Katie to mow the whole lawn?
9. You use $\frac{2}{3}$ of your yearly supply of construction paper during the first quarter of the year. Then, you use $\frac{5}{7}$ of what's left during the second quarter. During the third quarter, you use $\frac{3}{4}$ of what you have left (from the end of the second quarter). How much construction paper do you have left for the fourth quarter?
10. A necklace was broken in an amorous struggle. One third of the pearls fell to the ground, $\frac{1}{5}$ of them stayed on the couch, $\frac{1}{6}$ of the pearls were found by the woman and the man recovered $\frac{1}{10}$ of them. If six pearls remained on the string, of how many pearls was the necklace composed?
11. Patrick walks by the cookie jar and takes half of the cookies. Then, Debbie walks by and takes $\frac{2}{5}$ of what's left. Amy takes $\frac{2}{3}$ of what is left after Debbie has been there. If there are now 4 cookies left in the jar, how many were in there to begin with?
12. If you have 3 dozen bagels and 5 people to share them, how many dozen (or how much of a dozen) bagels does each person get?