

Name: _____

Word Problems

Group Members:

1. State and solve a word problem whose solution is $\frac{2}{3} \cdot \frac{4}{5}$.

2. In the above problem if you replace $\frac{4}{5}$ with $2\frac{4}{5}$, does your problem still make sense? If not, write a word problem whose solution is $\frac{2}{3} \cdot 2\frac{4}{5}$. If so, write a word problem whose solution is $\frac{2}{3} \cdot \frac{4}{5}$ that will not work if you replace $\frac{4}{5}$ with $2\frac{4}{5}$.

3. Joe has a ribbon that is 9 inches long. Joe cuts off $\frac{2}{3}$ of the piece and gives it to Jill.

(a) How long is the piece he gives to Jill?

(b) How long is the piece he keeps?

4. Joe has a ribbon that is 9 inches long. Joe cuts off a piece that is $\frac{2}{3}$ of an inch long and gives it to Jill.

(a) How long is the piece he gives to Jill?

(b) How long is the piece he keeps?

5. What is the difference between problem 3 and problem 4?

6. Explain what is wrong with the following word problems.

(a) The students in Mr. Jones' class must choose one of the following activities for recess: kickball, tetherball or hopscotch. One half of the class chose kickball; one third chose tetherball and one fifth chose hopscotch. What fraction of the class chose a sport that requires a ball?

(b) The students in Mr. Jones' class must choose one of the following activities for recess: kickball, tetherball or hopscotch. One half of the class chose kickball and one third chose tetherball. How many students chose hopscotch?

(c) Charlie has $2\frac{1}{3}$ bags of M&Ms. Kyle has $1\frac{1}{2}$ bags of Skittles. Who has more candy?

(d) Mr. Jones is taking a poll about favorite colors. Two and one third of his class chose blue as their favorite color. What fraction of the class did not choose blue?

7. Mr. Jones has 30 students. If they wish to take a foreign language they are allowed to take only one of the following: Spanish, French or German. One half of the class is taking a foreign language. One fifth of the students taking a foreign language are taking Spanish.
- (a) How many students are taking Spanish?

 - (b) How many students are taking French or German?

 - (c) How many students are not taking a foreign language?
8. Mr. Jones has 30 students. If they wish to take a foreign language they are allowed to take only one of the following: Spanish, French or German. One half of the class is taking a foreign language. One fifth of the students in Mr. Jones class are taking Spanish.
- (a) How many students are taking Spanish?

 - (b) How many students are taking French or German?

 - (c) How many students are not taking a foreign language?