Directions. Show a picture or diagram that illustrates the computation or relationships in a word problem for all problems. Do not simply calculate with numbers alone. Use your picture or diagram to find the answer to the question posed.

1. Illustrate \(6\frac{1}{3} - 2\frac{1}{2}\) and find the difference. Create a situation that fits the problem. Solve the problem in the context of the situation you created.

2. Illustrate \(6\frac{1}{4} \times 2\frac{1}{2}\) and find the product. Create a situation that fits the problem. Solve the problem in the context of the situation you created.

3. Illustrate \(6\frac{1}{4} + 1\frac{1}{4}\) and find the quotient. Create a situation that fits the problem. Solve the problem in the context of the situation you created.

4. Fill in the blank: 2 fifths = ____ fifteenths. Make a drawing or illustration that shows how someone could reason that your statement is true.

5. A fourth of the fans in the ballpark are wearing baseball caps with the brim facing forward. A third of the fans have a cap on their head with the brim facing backwards. The rest of the fans have no cap on at all. 420 fans have their cap on facing forward. How many more fans have their cap on backward than forward? Make a diagram that illustrates the situation and your resolution of it.

6. The store had a great sale – everything was 30% off. The sale price of a leather jacket was $210. How much was its pre-sale price? (Illustrate with bar graphs and solve the problem.)

7. We spent half of our party budget on refreshments and a third of what was left on the band. The rest was used for decorations. The decorations cost $90.00. How much more did we spend on refreshments than we spent on the band? (Illustrate with a drawing or diagram and solve the problem.)

8. In the decade of the 1990’s, the population of Pleasantville rose by 25%. In the year 2000, the population of Pleasantville was 60,000 people. What was the population in 1990? (Illustrate with a drawing or diagram and solve the problem.)

9. In the decade of the 1990’s, the population of Pleasantville rose by 25%. In the year 1990, the population of Pleasantville was 60,000 people. What was the population in 2000? (Illustrate with a drawing or diagram and solve the problem.)