Basic Math Homework #10

1) Simplify:
$$\frac{144}{338} \div \frac{105}{143} \div \frac{264}{819}$$

2) Simplify:
$$\sqrt[3]{\frac{1331}{343}}$$

3) Simplify:
$$\frac{11}{48} - \frac{1}{54} - \frac{5}{36}$$

4) Simplify:
$$\left(\frac{5}{8}\right)^0 \div \frac{7^0}{54} \cdot \frac{15}{72}$$

5) If a basketball team plays 48 games and wins 30, what fraction of the games did they lose?

6) Simplify:
$$\frac{63}{34} \left(\frac{7}{12} - \frac{5}{28} \right) + \sqrt{\frac{49}{144}} - \frac{8^{\circ}}{18}$$

7) If a $\frac{5}{12}$ pound steak contains $\frac{1}{8}$ pound of fat, how much does the steak weigh after the fat is removed?

8) Simplify:
$$\sqrt{\frac{288}{722}} \left(\frac{5}{24} - \frac{1}{20} \right) \div \left(\frac{7}{12} - \frac{3}{10} \right)$$

9) If $\frac{5}{8}$ of a pizza is shared equally by 3 people what fraction of the original pie did each person receive?

10) Simplify:
$$\frac{288}{5} \left(\frac{5}{48} + \frac{7}{36} \right) \div 86 - \frac{3^0}{12}$$

11) If Phoebe walks $\frac{11}{54}$ miles on Tuesday and $\frac{5}{72}$ miles on Wednesday, how far did she walk?

12) Simplify:
$$\frac{3^2}{24} + \frac{312}{4} \left(\frac{4}{39} - \frac{5}{52} \right) - \sqrt[3]{\frac{1}{343}}$$

Basic Math Homework #10

- 13) If you inherit $\frac{5}{8}$ of a \$10,000 inheritance and your child inherits $\frac{1}{5}$ of your portion, how much does your child get?
- 14) Simplify: $\sqrt{\frac{1}{4}} + \frac{5}{8} \div \left(\frac{7}{18} \frac{21}{54}\right) \div \frac{2^3}{12}$
- 15) If a recipe calls for 18 cups of flour but you want to only make $\frac{1}{4}$ of the recipe, how many cups of flour will you need?
- 16) Simplify: $\left(\frac{1}{7}\right)^2 \div \left(\frac{5}{98} + \frac{4}{147}\right) \div \frac{14^2}{322} + \sqrt[4]{\frac{256}{1296}}$
- 17) If Katelynn leaves her house and rides her bike $\frac{17}{8}$ miles away, stops and takes a break, and then continues on for another $\frac{11}{12}$ mile. If she then turns around and rides back $\frac{20}{9}$ miles, how far is she away from home?
- 18) Simplify: $\sqrt{\frac{27}{12}} + \frac{384}{6} \div 26 \left(\frac{7}{48} \frac{5}{64} \right) 7^0$
- 19) If a $\frac{25}{6}$ pound steak is to be cut into pieces that are $\frac{5}{18}$ pound each, how many pieces will you get?
- 20) Simplify: $\frac{8}{162} \div \left(\frac{8}{12} \frac{6}{18}\right)^3 \frac{132}{15} \left(\frac{1}{11} + \frac{5}{66}\right)^2$