

SHOW ALL WORK to receive full credit.

Use the percent Formula $\frac{\text{is}}{\text{of}} = \frac{\%}{100}$ to solve the following. Round money answers to the nearest cent (hundredth), all others to the nearest tenth. (3 points each)

1. 48 out of 72 is what _____ %

2. What number is 56% of 360? _____

Solve the following equations. Fraction answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (5 points each)

3. $-6x + 81 = -9x$

4. $2 - (5x - 4) = 3(63x + 8) - 7x - 3$

Find the percent of increase or decrease. Round % to the nearest tenth if necessary. (6 points)

5. Mr. Cleaver went to KMart to buy a chainsaw. If the price went from \$140 to \$105, what was the percent increase or decrease?

Increase of Decrease? _____ How Much ? _____

What is the % of increase of decrease? _____

Reduce the following fractions, and then change the improper fractions to a mixed number. (1 point each)

6. $\frac{27}{5} =$

7. $\frac{63}{36} =$

Simplify the following expressions using positive and negative integers. (2 point each)

8. $-3 - (-7) =$

9. $6 - (-10) =$

Multiply or divide the following fractions. Answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (1 point each)

10. $3\frac{5}{6} \cdot 2\frac{1}{4} =$

11. $6\frac{2}{9} \div 7 =$

Add or subtract the following fractions. Answers must be reduced to lowest terms. Change improper fractions to mixed numbers. (1 point each)

12. $8\frac{1}{14} + 5\frac{5}{14} =$

13. $\frac{5}{16} - \frac{1}{4} =$

14. $2\frac{3}{5} - 1\frac{2}{3} =$

15. $2\frac{7}{12} + 1\frac{5}{8} =$

Change from scientific notation to standard notation. (4 points each)

16. $4.5 \times 10^{-3} =$ _____

17. $3.017 \times 10^6 =$ _____

Change from standard notation to scientific notation. (4 points each)

18. $0.000579 =$ _____

19. $456,000,000,000 =$ _____

SHOW ALL WORK to receive full credit.

Use the percent Formula $\frac{\text{is}}{\text{of}} = \frac{\%}{100}$ to solve the following. Round money answers to the nearest cent (hundredth), all others to the nearest tenth. (3 points each)

1. 90 is 40% of what number? _____
2. 30 out of 150 is _____%

Solve the following equations. Fraction answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (5 points each)

3. $5x - 46 = 28x$
4. $-2(5x + 9) + 16 = 6(x - 11) + 2x$

Find the percent of increase or decrease. Round % to the nearest tenth if necessary. (5 points)

5. Ms. Lauerman went to see a Women's Basketball Game at Stanford University. If the price of the ticket was \$55 last season and this season the price is \$70, what was the percent of the increase or decrease?

Increase of Decrease? _____ How Much ? _____

What is the % of increase of decrease? _____

Reduce the following fractions, and then change the improper fractions to a mixed number. (1 point each)

6. $\frac{33}{6} =$
7. $\frac{52}{12} =$

Simplify the following expressions using positive and negative integers. (1 point each)

8. $-6 - (-3) =$
9. $4 - (-12) =$

Evaluate the following exponents. (1 point each)

10. $5^2 =$

11. $3^3 =$

12. $(-6)^2 =$

Multiply or divide the following fractions. Answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (1 points each)

13. $\frac{6}{16} \cdot \frac{4}{24} =$

14. $6\frac{2}{4} \div 2\frac{4}{8} =$

Add or subtract the following fractions. Answers must be reduced to lowest terms. Change improper fractions to mixed numbers. (1 points each)

15. $6\frac{2}{12} + 3\frac{8}{12} =$

16. $\frac{8}{9} - \frac{2}{3} =$

17. $4\frac{3}{10} - 1\frac{4}{5} =$

18. $7\frac{2}{15} + 8\frac{9}{10} =$

Change from scientific notation to standard notation. (4 points each)

19. $9.03 \times 10^7 =$ _____

20. $3.1 \times 10^{-8} =$ _____

Change from standard notation to scientific notation. (4 points each)

21. $0.0004005 =$ _____

22. $10,900,000 =$ _____