

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. (2 points each)

1. 36 out of 45 is what _____% 2. 56% of 600 is _____ 3. 72 is 72% of _____

Solve the following equations. Fraction answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (3 points each)

4. $4x - 25 = 12$ 5. $2(7x - 2) = -x - 9$

6. $2(5k + 9) + 16 = 6(k + 9) + 2k$ 7. $\frac{14}{x+15} = \frac{8}{x+5}$

Find the percent of increase or decrease. Round % to the nearest tenth if necessary. (4 points each)

8. Best Buy is offering a sale on iPhones. They originally sold for \$299.99, but the sale price is \$199.99. What was the percent of the increase or decrease?

Increase of Decrease? _____ How Much ? _____

What is the % of increase of decrease? _____

Change the following improper fractions to mixed numbers. (2 points each)

9. $\frac{37}{9} =$

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

Change the following mixed numbers to improper fractions. (2 points each)

11. $3\frac{1}{8} =$

12. $9\frac{1}{4} =$

Multiply or divide the following fractions. Answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (2 points each)

13. $\frac{5}{13} \cdot \frac{2}{10} =$

14. $3\frac{5}{6} \cdot \frac{2}{3} =$

15. $4 \cdot \frac{5}{24} =$

16. $\frac{3}{5} \div \frac{15}{25} =$

17. $\frac{6}{7} \div 18 =$

18. $5\frac{3}{7} \div 1\frac{2}{3} =$

Add or subtract the following fractions. Answers must be reduced to lowest terms. Change improper fractions to mixed numbers. (2 points each)

19. $\frac{2}{12} + \frac{1}{12} =$

20. $9\frac{2}{5} + 2\frac{3}{5} =$

21. $\frac{7}{10} - \frac{3}{10} =$

22. $9\frac{1}{4} - 1\frac{3}{4} =$

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Solve the following equations. Fraction answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (3 points each)

1. $9x = -24$

2. $8x - 13 = -7$

3. $3x - 19 = 8x - 7$

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

5. $8(3x - 2) - (15x - 4) = 18$

6. $\frac{2x-8}{5} = \frac{6x-2}{6}$

Find the percent of increase or decrease. Round % to the nearest tenth if necessary. (4 points each)

7. A car originally sold for \$33,950, 5 years later the Kelly Blue Book appraised the car for \$18,000. Find the percent of increase or decrease.

Increase of Decrease? _____ How Much ? _____

What is the % of increase of decrease? _____

Percent Problems: (2)

8. Jordyn just got back her final exam, and she received 340 points out of the 400 points possible. What percent did she receive?

Change the following improper fractions to mixed numbers and reduce. (3 points each)

9. $\frac{22}{8} =$

10. $\frac{32}{12} =$

Multiply or divide the following fractions. Answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (2 points each)

11. $\frac{7}{8} \cdot \frac{20}{21} =$

12. $2\frac{1}{12} \cdot 2\frac{2}{15} =$

13. $3\frac{1}{3} \cdot 6 =$

14. $\frac{11}{12} \div \frac{5}{18} =$

15. $1\frac{5}{9} \div 7 =$

16. $2\frac{5}{8} \div 2\frac{4}{5} =$

Add or subtract the following fractions. Answers must be reduced to lowest terms. Change improper fractions to mixed numbers. (2 points each)

17. $\frac{5}{15} + \frac{7}{15} =$

18. $1\frac{2}{5} + 2\frac{4}{5} =$

19. $\frac{13}{18} - \frac{5}{18} =$

20. $3\frac{2}{5} - 1\frac{4}{5} =$

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. (1 point each)

1. 32 out of 45 is what _____%

2. 5% of 600 is _____

Solve the following equations. Fraction answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (3 points each)

3. $4x - 26 = 12$

4. $3(7x - 2) = -x - 9$

5. $-2(2x + 1) - (4x + 2) = -4(x - 3)$

6. $\frac{x-11}{-2} = \frac{3x+3}{3}$

Find the percent of increase or decrease. Round % to the nearest tenth if necessary. (4 points)

7. Verizon is offering an after Christmas sale on “droid” phones. They originally sold for \$199.99, but the sale price is \$79.99. What was the percent of the increase or decrease?

Increase of Decrease? _____ How Much ? _____

What is the % of increase of decrease? _____

Change the following improper fractions to mixed numbers. (2 points each)

8. $\frac{39}{9} =$

9. $\frac{27}{4} =$

Change the following mixed numbers to improper fractions. (2 points each)

10. $5\frac{2}{7} =$

11. $9\frac{3}{5} =$

Multiply or divide the following fractions. Answers must be reduced to lowest terms, but may be left as either improper fractions or mixed numbers. (2 points each)

12. $\frac{3}{4} \cdot \frac{1}{5} =$

13. $4\frac{3}{7} \cdot \frac{7}{12} =$

14. $\frac{3}{8} \cdot 18 =$

15. $\frac{2}{3} \div \frac{4}{18} =$

16. $12 \div \frac{5}{6} =$

17. $3\frac{2}{5} \div 1\frac{3}{10} =$

Add or subtract the following fractions. Answers must be reduced to lowest terms. Change improper fractions to mixed numbers. (2 points each)

18. $3\frac{2}{12} + \frac{1}{12} =$

19. $9\frac{1}{4} - \frac{3}{4} =$

20. $\frac{1}{2} + \frac{1}{4} =$

21. $\frac{2}{3} + \frac{1}{4} =$

22. $\frac{5}{8} - \frac{1}{2} =$

23. $\frac{3}{4} - \frac{1}{12} =$