Algebra Foundations Quiz # 38 Week 14 Monday Name_____

SHOW ALL WORK to receive full credit.

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

1. $-18x$
   $+25x$
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2. $-7x - 8x + 13 - 9$

3. $-2(4x - 3) - 7 + 2x$

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)

4. 18 is _____% of 45

5. 256 is 40% of _____

6. 35% of 125 is _____

7. 123 is _____% of 150

Answer each of the following applications to Mental Percents questions. Answers must be rounded to the nearest cent (hundredths). (2 points each)

8. Mr. Huber went to REI to buy some camping equipment. He found an eight person tent that was clearanced at 75% off the regular price of $225. Find the tent's clearance price.

   Amount of Discount: _____

   Clearance Price: _____

9. Halloween City marked everything down 60% on November 1. If Mrs. Woodruff bought 4 sets of Halloween lights that were originally priced at $24 each, how much did she spend on the lights?

   Total Original Price for 4 sets: _____

   Amount of Discount for 4 sets: _____

   Sales Price for 4 sets: _____

18 points

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)

10. $8x + 6 = 11$

11. $7x - 11 - 10x + 21 = 28$

12. $8(x + 2) - 2(2x + 5) = 2(x - 3) - 9 - 5x$

13. $\frac{3x+14}{x+30} = \frac{5}{8}$

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

14. Wal-Mart rolled back their price on the TI-84 Plus Graphing Calculator last month. The price of the calculator went from \$105.00 to \$99.00. Answer the following:

    Was this an increase or decrease?_____ How Much? _____

    What is the % of increase of decrease?_____

15. Southwest's ticket prices for a one-way trip to Los Angeles went from \$68.00 to \$102.00. Answer the following.

    Was this an increase or decrease?_____ How Much? _____

    What is the % of increase of decrease?_____

Reduce the following fractions. (2 points each)

16. $\frac{21}{24} =$

17. $\frac{56}{24} =$

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

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

19. $9\frac{3}{8} =$

32 points

Algebra Foundations Quiz # 39 Week 14 Tuesday Name_____

SHOW ALL WORK to receive full credit.

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

1. $\begin{array}{r} 14x \\ -22x \\ \hline \end{array}$

2. $24x - 16 + 7 - 2x$

3. $-6(x - 5) + 6 - 4x$

Use the percent Formula $\frac{\textbf{is}}{\textbf{of}} = \frac{\%}{\textbf{100}}$ to solve the following. Round money answers to the nearest cent (hundredth), all others to the nearest tenth. (2 points each)

4. 10 is _____% of 50

5. 123 is 25% of _____

6. 65% of 240 is _____

7. 120 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. (3 points each)

8. $10x + 2 = 17$

9. $14x - 10 = 8x - 7$

10. $-2(2x + 1) - (4x + 2) = -4(x - 3)$

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

26 points

Answer each of the following applications to Mental Percents questions. Answers must be rounded to the nearest cent (hundredths). (4 points)

12. Mr. Loken went to Leslie's Pool Supply for an end of the season sale. Everything was on clearance for 40% off. He bought several pool toys that would have cost a total of $82 before the sale. How much did he pay after the sale?

    Amount of Discount: _____

    Clearance Price: _____

Find the percent of increase or decrease. Round % to the nearest tenth if necessary. (3 points each)

13. Mrs. Spiess bought a new bicycle helmet for her daughter on amazon.com when the price changed from $28.99 to $20.29. Answer the following.

    Was this an increase or decrease?_____ How Much? _____

    What is the % of increase of decrease?_____

14. Gas went from $3.29 per gallon to $3.63 per gallon one month. Answer the following.

    Was this an increase or decrease?_____ How Much? _____

    What is the % of increase of decrease?_____

Reduce the following fractions. (2 points each)

15. $\frac{24}{27} =$

16. $\frac{8}{12} =$

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

17. $6\frac{3}{5} =$

18. $2\frac{4}{9} =$

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

19. $\frac{1}{2} \cdot \frac{6}{7}$

20. $\frac{5}{12} \cdot \frac{8}{15}$

21. $\frac{2}{3} \cdot 12$

24 points

Algebra Foundations Quiz # 40 Week 14 Friday Name_____

SHOW ALL WORK to receive full credit.

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

1. $\begin{array}{r} 6x \\ -28x \\ \hline \end{array}$

2. $15x - 8 + 9 - 19x$

3. $-3(2x - 7) + 5 - 12x$

Use the percent Formula $\frac{\textbf{is}}{\textbf{of}} = \frac{\%}{\textbf{100}}$ to solve the following. Round money answers to the nearest cent (hundredth), all others to the nearest tenth. (2 points each)

4. 34 is _____% of 136

5. 48 is 20% of _____

6. 75% of 120 is _____

7. 68 out of 80 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)

8. $7x + 6 = 15$

9. $12x - 16 = -4x + 32$

10. $-3(2x + 8) - (x + 6) = 4(-2x + 12)$

11. $\frac{x-6}{4} = \frac{-5x+2}{-6}$

26 points

Answer each of the following applications to Mental Percents questions. Answers must be rounded to the nearest cent (hundredths). (4 points)

12. Mrs. Frost had to buy some Milk Bones for her pup, so she went to PetSmart because they were having a 30% off sale. If a box of Milk Bones is $9.00, what will she have to pay after the discount?

    Amount of Discount: _____

    Sales Price: _____

Find the percent of increase or decrease. Round % to the nearest tenth if necessary. (3 points each)

13. Mr. Loken was going camping and needed to buy a new ice chest, so he went to Lowe's. Ice chests originally cost $28.00 , but were on sale for $21.00 Answer the following.

    Was this an increase or decrease?_____ How Much? _____

    What is the % of increase of decrease?_____

14. The cost of milk went from $1.60 per gallon to $2.40. Answer the following.

    Was this an increase or decrease?_____ How Much? _____

    What is the % of increase of decrease?_____

Reduce the following fractions. (2 points each)

15. $\frac{18}{24} =$

16. $\frac{15}{27} =$

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

17. $3\frac{2}{5} =$

18. $8\frac{6}{7} =$

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

19. $\frac{3}{4} \cdot \frac{1}{5}$

20. $4\ \frac{3}{7} \cdot \frac{7}{12}$

21. $\frac{3}{8} \cdot 18$

24 points