Algebra Foundations   Quiz # 26   Week 10 Monday   Name_____

SHOW ALL WORK to receive full credit.

Multiply or divide. (2 points each)

1.   6 8 4
      $\times$ 3 9

2. $6\overline{)1\ 8\ 4\ 5}$

Divide. (3 points)

53	53	53	53	53	53	53	53	53
x 1	x 2	x 3	x 4	x 5	x 6	x 7	x 8	x 9
53	106	159	212	265	318	371	424	477

3.

   $53\overline{)3\ 0\ 7\ 4\ 0}$

Complete the diamond problems. (2 points each)

4.

7   −4

5.

−11   5

6.

−8   −9
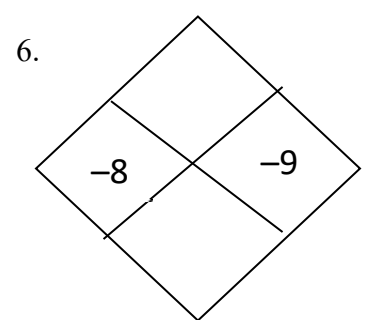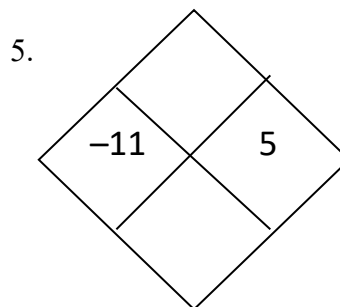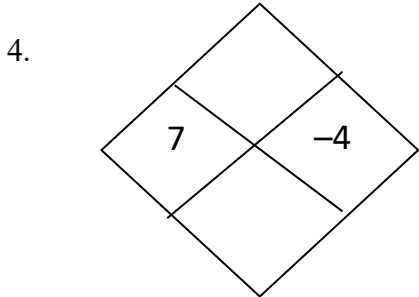
Simplify the following expressions using positive and negative integers. (1 point each)

7. $8 - 10 =$ _____

8. $-4 - 8 =$ _____

9. $-4 + 8 - 7 =$ _____

10. $9 - 6 - 2 =$ _____

11. $-3 - 2 + 7 =$ _____

12. $6 + 4 - 2 + 5 =$ _____

13.   −15
      + 5
      _____

14.   6
      −7
      _____

15.   −9
      −4
      _____

22 points

Complete the following without the use of a table, but still think of the mental percents to help you. (2 points each)

16. What is 26% of $160.00? _____

17. What is 98% of 70? _____

18. What is 65% of $190.00? _____

19. What is 40% of 85? _____

Solve the following equations. (2 points each)

20. $-5x = 20$

21. $x + 8 = 5$

22. $6x - 2 = 3x + 10$

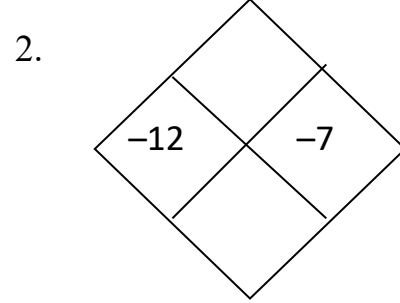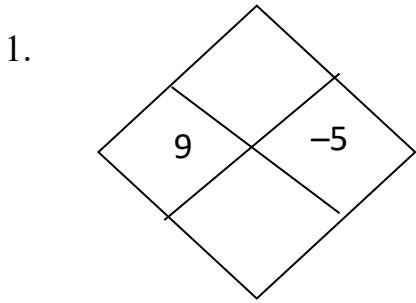23. $5x + 6 = -4$

(3 points each)

24. $\dfrac{3}{-8} = \dfrac{6}{x}$

25. $\dfrac{3}{4} = \dfrac{x-3}{8}$

26. $\dfrac{x+4}{3} = \dfrac{x+20}{5}$

27. $4(8x + 3) = 7(x + 6) + 20$

28 points

Algebra Foundations Quiz # 27   Week 10 Tuesday   Name_____ (+1)

SHOW ALL WORK to receive full credit.

Complete the diamond problems. (2 points each)

1.

9 | −5

2.

−12 | −7

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

3. $6 - 11 =$ _____

4. $-1 - 3 =$ _____

5. $-7 + 10 - 2 =$ _____

6. $9 - 1 - 6 =$ _____

7. $-8 - 3 + 5 =$ _____

8. $3 + 8 - 8 + 6 =$ _____

9. $\begin{array}{r} -12 \\ +\ 4 \\ \hline \end{array}$

10. $\begin{array}{r} 3 \\ -17 \\ \hline \end{array}$

11. $\begin{array}{r} -11 \\ -7 \\ \hline \end{array}$

Complete the following without the use of a table, but still think of the mental percents to help you. (2 points each)

12.   What is 27% of $280.00? _____

13.   What is 35% of 20? _____

14.   What is 85% of $140.00? _____

15.   What is 60% of 72? _____

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

16. Macy's is having a sale on winter coats this weekend and is selling them for 25% off the marked price. What would be the sale price of a coat that originally sold for $200.00?

Discount: _____

Sales Price: _____

24 points

17. Home Depot is having an end of summer sale, so all gardening supplies are 35% off the marked price. What would be the sale price of a hose that is originally sold for $25.00?

Discount: _____

Sales Price: _____

Solve the following equations. (2 points each)

18. $-8x = 32$

19. $x + 13 = 2$

20. $7x - 4 = 6x + 2$

21. $8x + 4 = -20$
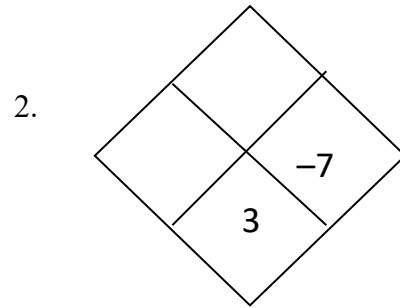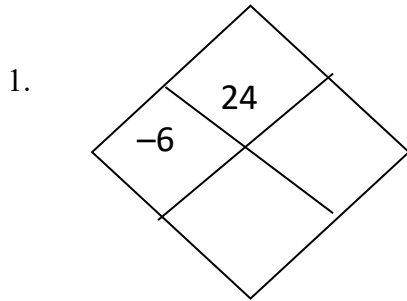
(4 points each)

22. $\dfrac{3}{-4} = \dfrac{x}{8}$

23. $\dfrac{6}{3} = \dfrac{x-2}{4}$

24. $\dfrac{x-5}{20} = \dfrac{x+7}{10}$

25. $5(3x + 6) = 6(4x + 3) - 3x$

26 points

Algebra Foundations Quiz # 28   Week 10 Friday   Name_____

SHOW ALL WORK to receive full credit.

Complete the diamond problems. (1 point each)

1.

24

−6

2.

−7

3

Combine the following. (1 point each)

3. $7 - 15 =$ _____

4. $-10 - 3 =$ _____

5. $-7 + 8 - 2 =$ _____

6. $9 - 7 - 6 =$ _____

7. $-9 - 3 + 6 =$ _____

8. $6 - 8 + 4 - 2 =$ _____

9.
$$
\begin{array}{r} -16 \\ +\ 4 \\ \hline \end{array}
$$

10.
$$
\begin{array}{r} 7 \\ -21 \\ \hline \end{array}
$$

11.
$$
\begin{array}{r} -15 \\ -\ 7 \\ \hline \end{array}
$$

12. $7x - 5 - 3x$

13. $6x - 4 - 8x + 9$

14. $-5x + 3 - 4x - 7$

Complete the following without the use of a table, but still think of the mental percents to help you.   (2 points each)

15.   What is 22% of $130.00? _____

16.   What is 15% of $36.00? _____
                                                                (TIP)

17.   What is 8% of 250.00? _____
              (Tax)

18.   What is 60% of 72? _____

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

19. REI is having a sale on snow boards this weekend and is selling them for 30% off the marked price. What would be the sale price of a snow board that originally sold for $380.00?

    Discount: _____

    Sales Price: _____

24 points

20. Ikea is having an end of summer sale, so all outdoor furniture is 35% off the marked price. What would be the sale price of a patio set that is originally sold for $850.00?

Discount: _____

Sales Price: _____

Solve the following equations. (2 points each)

21. $6x = -42$

22. $x + 9 = 5$

23. $9x + 7 = 6x - 8$

24. $7 - 2x = -5$

(4 points each)

25. $\dfrac{5}{x} = \dfrac{-6}{18}$

26. $\dfrac{14}{x-3} = \dfrac{7}{4}$

27. $\dfrac{5}{x-3} = \dfrac{8}{x+3}$

28. $4(5x - 3) - 4x = 7(2x + 1) - 3$

26 points