

CHAPTER 1, FORM A

BEGINNING ALGEBRA

NAME: _____

SECTION: _____

For Exercises 1 – 3, write your answer in lowest terms.

1. Write $\frac{1404}{594}$ in lowest terms.

1. _____

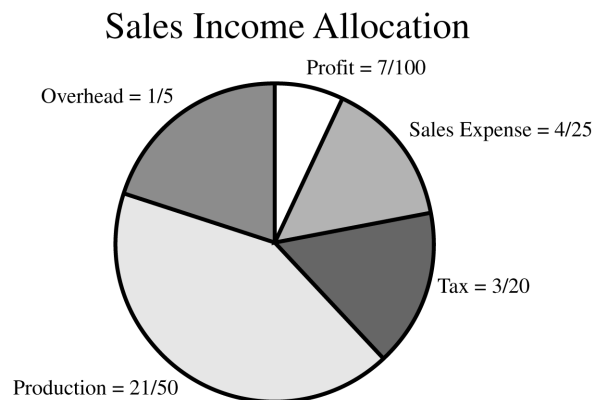
2. Add $\frac{2}{3} + \frac{3}{4} + \frac{7}{12}$.

2. _____

3. Divide: $\frac{12}{70} \div \frac{6}{50}$.

3. _____

For Exercise 4 refer to the following chart.



4. (a) What fractional part of total sales income went to areas other than taxes?

4 (a) _____

(b) If 19.6 million dollars was the total sales income, how much of it went for overhead?

(b) _____

5. Decide whether $4[-20 + 9(-2)] \geq 135$ is true or false.

5. _____

6. Graph the group of numbers

$|-4|$, $-|2|$, $-3\frac{3}{8}$, $-|-1|$ _____

on the given number line.

6. See graph

7. To which of the following sets does $1.\overline{7}$ belong:
natural numbers, whole numbers, integers,
rational numbers, irrational numbers, real numbers? 7. _____
8. In the expression $\frac{r-s}{r \cdot s}$, if the value of r is positive,
and the value of s is negative, is the value of the
expression positive or negative? 8. _____
9. Select the smaller number: $-9, -|-8|$ 9. _____
10. Write the following in symbols and then simplify
the expression. 10. _____

*The product of 5 and -8 , divided
by the sum of -3 and -5 .*

For Exercises 11 – 17, perform the indicated operations whenever possible. Leave all fractional answers in lowest terms.

11. $8 - (6 - 18) + (-10)$ 11. _____
12. $-12\frac{3}{4} + 5\frac{2}{3}$ 12. _____
13. $-9 - [-4 - (7 - 15)]$ 13. _____
14. $3^3 + (-2)^2 - (5^2 - 6)$ 14. _____
15. $(-6)(-9) + 7(-2) + (-3)^2$ 15. _____
16. $\frac{14(-3 - 2)}{12(-3) + (-8 - 1)(3 - 7)}$ 16. _____
17. $\frac{-9[3 + (-2 + 6)]}{-7[3 - (-4)] - 8(-5)}$ 17. _____

For Exercises 18 – 19, find the solution for each equation from the set $\{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$ by guessing or by trial and error.

18. $\frac{15}{x} = -3$ 18. _____

19. $3a - 5 = 4$ 19. _____

For Exercises 20 – 21, evaluate the expression, given $m = 3$ and $p = -5$.

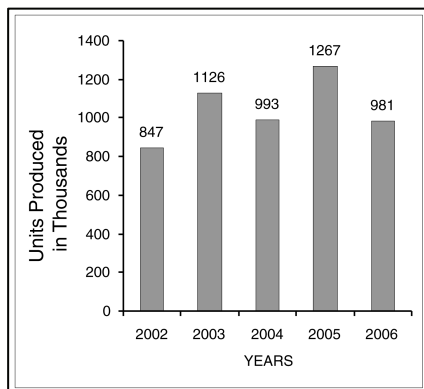
20. $9m - 2p^2$ 20. _____

21. $\frac{4m + 8p}{-2(m + p)}$ 21. _____

22. Kira lives in Marietta, Georgia, where the altitude is 1118 feet. Her brother Rick lives in Calipatria, California, where the altitude is 184 feet below sea level. Find the difference in altitude between the two cities. 22. _____

23. When calculating total GPA points, 4 points are awarded for each credit hour in which an A is earned, 3 points per credit hour for each B, 2 points per credit hour for each C, 1 point per credit hour for each D, and no points are awarded for F's. If a student has fourteen credit hours worth of A's, 9 hours worth of B's, 16 credit hours worth of C's, 5 credit hours worth of D's, and 2 credit hours worth of F's, how many total GPA points does she have? 23. _____

24. The following bar graph shows the number of units, in thousands, produced by BJ Electronics during the years 2002 through 2006. Use a signed number to represent the changes from 2004 to 2005. 24. _____



For Exercises 25 – 29, match the property in Column I with its example in Column II.

COLUMN I

COLUMN II

25. Commutative A. $1 \cdot x = x$ 25. _____

26. Associative B. $7x + 2 = 2 + 7x$ 26. _____

27. Identity C. $45 + 3y = 3(15 + y)$ 27. _____

28. Inverse D. $3x + (3y + 6) = (3x + 3y) + 6$ 28. _____

29. Distributive E. $-\frac{1}{4}(-4) = 1$ 29. _____

30. Use the distributive property to rewrite the expression.
Simplify if possible. 30. _____

$$-2(3a - 4b + 2c)$$

31. Give an example which shows that division is not
commutative. 31. _____

In Exercises 32 – 33, simplify by combining like terms.

32. $5x + 4x - 6x + x + 13x$ 32. _____

33. $5(2x - 1) - (x - 14) + 2(3x - 5)$ 33. _____

CHAPTER 1, FORM B

BEGINNING ALGEBRA

NAME: _____

SECTION: _____

For Exercises 1 – 3, write your answer in lowest terms.

1. Write $\frac{432}{198}$ in lowest terms.

1. _____

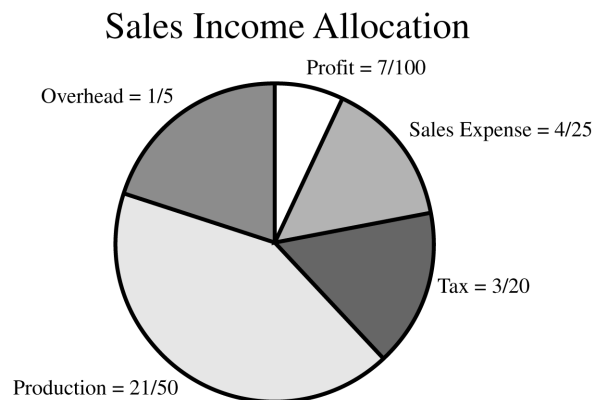
2. Add $\frac{3}{5} + \frac{1}{3} + \frac{4}{15}$.

2. _____

3. Divide: $\frac{21}{56} \div \frac{7}{40}$.

3. _____

For Exercise 4 refer to the following chart.



4. (a) What fractional part of total sales income went to areas other than profit?

4 (a) _____

(b) If 20.4 million dollars was the total sales income, how much of it went for overhead?

(b) _____

5. Decide whether $-7[-13 + 7(-3)] \leq 260$ is true or false.

5. _____

6. Graph the group of numbers

$-|3|, -|-1|, -4\frac{1}{8}, |-2|$

on the given number line.

6. See graph

7. To which of the following sets does $\sqrt{3}$ belong:
natural numbers, whole numbers, integers,
rational numbers, irrational numbers, real numbers? 7. _____
8. In the expression $\frac{a-b}{a \cdot b}$, if the value of a is positive,
and the value of b is negative, is the value of the
expression positive or negative? 8. _____
9. Select the smaller number: -11 , $-|-9|$ 9. _____
10. Write the following in symbols and then simplify
the expression. 10. _____
*The product of 2 and -14 , divided
by the sum of 5 and -7 .*

For Exercises 11 – 17, perform the indicated operations whenever possible. Leave all fractional answers in lowest terms.

11. $5 - (7 - 15) + (-13)$ 11. _____
12. $-9\frac{4}{5} + 5\frac{1}{4}$ 12. _____
13. $-7 - [-6 - (12 - 7)]$ 13. _____
14. $3^2 + (-2)^3 + (4^2 - 5)$ 14. _____
15. $(-16)(-3) + 2(-7) + (-5)^2$ 15. _____
16. $\frac{5(-3-2)}{3(-13) - (-5-4)(1-5)}$ 16. _____
17. $\frac{-4[5 + (-2 + 11)]}{-5[4 - (-3)] - 4(-7)}$ 17. _____

For Exercises 18 – 19, find the solution for each equation from the set $\{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$ by guessing or by trial and error.

18. $\frac{12}{y} = -3$ 18. _____

19. $5a + 7 = -8$ 19. _____

For Exercises 20 – 21, evaluate the expression, given $m = 3$ and $p = -4$.

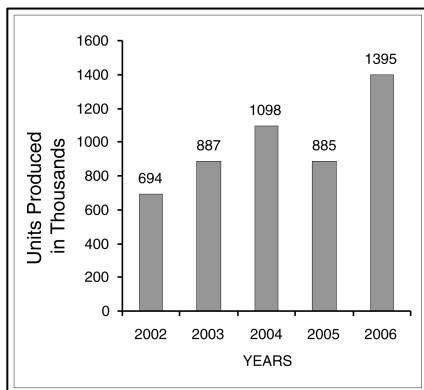
20. $9m - 4p^2$ 20. _____

21. $\frac{-4m + 6p}{2(m - p)}$ 21. _____

22. On March 28, the temperature in Chicago at 6:00 A.M. was -26° F. By 2:00 P.M., the temperature had risen 14° . What was the temperature at 2:00 P.M. on March 28? 22. _____

23. When calculating total GPA points, 4 points are awarded for each credit hour in which an A is earned, 3 points per credit hour for each B, 2 points per credit hour for each C, 1 point per credit hour for each D, and no points are awarded for F's. If a student has fourteen credit hours worth of A's, 11 hours worth of B's, 16 credit hours worth of C's, 5 credit hours worth of D's, and 3 credit hours worth of F's, how many total GPA points does she have? 23. _____

24. The following bar graph shows the number of units, in thousands, produced by BJ Electronics during the years 2002 through 2006. Use a signed number to represent the changes from 2004 to 2005. 24. _____



For Exercises 25 – 29, match the property in Column I with its example in Column II.

COLUMN I

COLUMN II

25. Commutative A. $\left(-\frac{4}{3}\right)\left(-\frac{3}{4}\right) = 1$ 25. _____

26. Associative B. $54 + 6w = 6(9 + w)$ 26. _____

27. Identity C. $7 + 5a = 5a + 7$ 27. _____

28. Inverse D. $2a + (3b + 6) = (2a + 3b) + 6$ 28. _____

29. Distributive E. $1 \cdot c = c$ 29. _____

30. Use the distributive property to rewrite the expression.
Simplify if possible. 30. _____

$$-4(5r - 3s + 2t)$$

31. Give an example which shows that subtraction is not commutative. 31. _____

In Exercises 32 – 33, simplify by combining like terms.

32. $10y - 4y + 13y - y + 2y$ 32. _____

33. $4(5x - 2) - (x - 9) + 5(2x - 9)$ 33. _____

CHAPTER 1, FORM C

BEGINNING ALGEBRA

NAME: _____

SECTION: _____

For Exercises 1 – 3, write your answer in lowest terms.

1. Write $\frac{429}{1452}$ in lowest terms.

1. _____

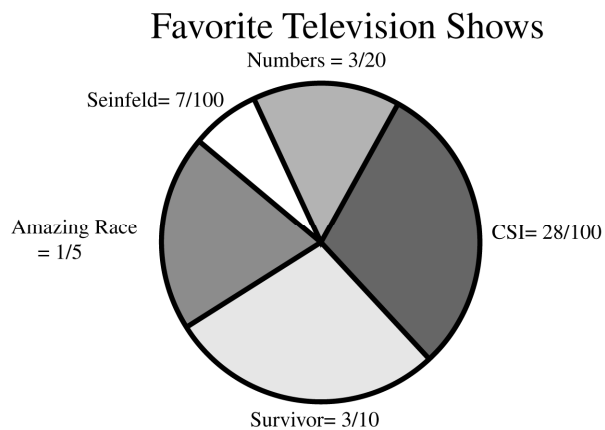
2. Add $\frac{1}{8} + \frac{2}{3} + \frac{7}{12}$.

2. _____

3. Divide: $\frac{42}{55} \div \frac{30}{35}$.

3. _____

For Exercise 4 refer to the following chart.



4. (a) What fractional portion of the people interviewed liked a show other than Amazing Race?

4 (a) _____

(b) If 50,000 people were interviewed, how many of them liked CSI best?

(b) _____

5. Decide whether $5^2 + (-12)^2 = 13^2$ is true or false.

5. _____

6. Graph the group of numbers

$|3|, -|-2|, -1\frac{1}{8}, -|-3|$ _____

on the given number line.

6. See graph

7. To which of the following sets does -3 belong:
natural numbers, whole numbers, integers,
rational numbers, irrational numbers, real numbers? 7. _____
8. In the expression $\frac{a \div b}{a + b}$, if the values of a and b are
both negative, is the value of the expression positive
or negative? 8. _____
9. Select the larger number: -0.998 , -0.997 9. _____
10. Write the following in symbols and then simplify
the expression. 10. _____

*The product of 12 and -5 , divided
by the difference of 3 and -2 .*

For Exercises 11 – 17, perform the indicated operations whenever possible. Leave all fractional answers in lowest terms.

11. $-9 + (-8 + 6) + (7 - 10)$ 11. _____
12. $5\frac{4}{5} - 6\frac{5}{6}$ 12. _____
13. $-11 - [-7 + (12 - 7)] - (-5)$ 13. _____
14. $13 + (2)^3 + (4^2 - 14)$ 14. _____
15. $(-7)(-9) + 4(-3) + (-5)^2$ 15. _____
16. $\frac{26(-4 - 2)}{8(-9) + (-7 - 4)(2 - 5)}$ 16. _____
17. $\frac{-8[4 + (-2 + 7)]}{-3[4 - (-9)] - 3(-9)}$ 17. _____

For Exercises 18 – 19, find the solution for each equation from the set $\{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$ by guessing or by trial and error.

18. $\frac{16}{t} = -8$ 18. _____

19. $9b - 3 = -30$ 19. _____

For Exercises 20 – 21, evaluate the expression, given $m = -4$ and $p = 6$.

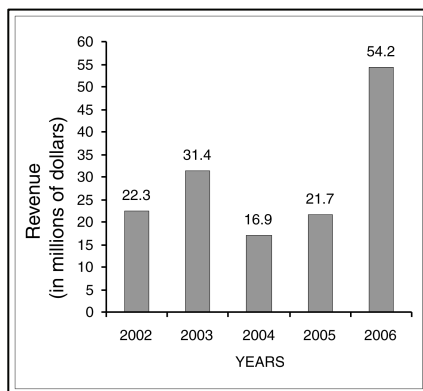
20. $2m^2 - 5p$ 20. _____

21. $\frac{-3m + 5p}{2(p - m)}$ 21. _____

22. On March 15, the temperature in St. Paul, Minnesota was -42°F . On June 4, the temperature in Grand Rapids, Michigan was 96° higher. What was the temperature in Grand Rapids, Michigan on March 15? 22. _____

23. When calculating total GPA points, 4 points are awarded for each credit hour in which an A is earned, 3 points per credit hour for each B, 2 points per credit hour for each C, 1 point per credit hour for each D, and no points are awarded for F's. If a student has 14 credit hours worth of A's, 11 credit hours worth of B's, 15 credit hours worth of C's, 4 credit hours worth of D's, and 6 credit hours worth of F's, how many total GPA points does she have? 23. _____

24. The following bar graph shows the revenue, in millions of dollars, received by Simmons Air Conditioning during the years 2002 through 2006. Use a signed number to represent the change from 2004 to 2005. 24. _____



For Exercises 25 – 29, match the property in Column I with its example in Column II.

COLUMN I

COLUMN II

25. Associative A. $18 + 10p = 2(9 + 5p)$ 25. _____

26. Commutative B. $(-3)\left(-\frac{1}{3}\right) = 1$ 26. _____

27. Distributive C. $x \cdot 1 = x$ 27. _____

28. Identity D. $7 \cdot 3p = 3p \cdot 7$ 28. _____

29. Inverse E. $2x + (3y + z) = (2x + 3y) + z$ 29. _____

30. Use the distributive property to rewrite the expression.
Simplify if possible. 30. _____

$$7(4r) + 7(-3s)$$

31. Give an example of a number that is a whole number
but not a natural number. 31. _____

In Exercises 32 – 33, simplify by combining like terms.

32. $2(6a - 1) - (2a - 3) + 3(7a - 5)$ 32. _____

33. $-7t - 3t + 16t - t + 11t$ 33. _____

CHAPTER 1, FORM D

BEGINNING ALGEBRA

NAME: _____

SECTION: _____

For Exercises 1 – 3, write your answer in lowest terms.

1. Write $\frac{627}{874}$ in lowest terms.

1. _____

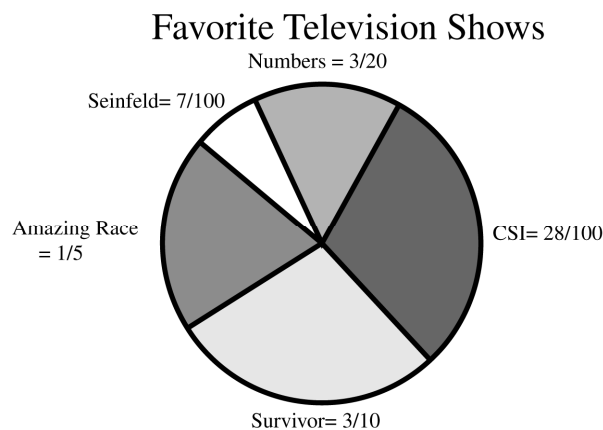
2. Add $\frac{1}{8} + \frac{2}{3} + \frac{5}{12}$.

2. _____

3. Divide: $\frac{45}{52} \div \frac{63}{91}$.

3. _____

For Exercise 4 refer to the following chart.



4. (a) What fractional portion of people interviewed liked a show other than Seinfeld?

4. (a) _____

(b) If 23,000 people were interviewed, how many of them liked Numbers best?

(b) _____

5. Decide whether $(-6)^2 + 8^2 = (-10)^2$ is true or false.

5. _____

6. Graph the group of numbers

$-|3|, |-1|, -4\frac{1}{8}, -|-1|$ _____

on the given number line.

6. See graph

7. To which of the following sets does 0.494949... belong: natural numbers, whole numbers, integers, rational numbers, irrational numbers, real numbers? 7. _____
8. In the expression $\frac{(a-b)(b-a)}{a \cdot b}$, if the value of a is negative and the value of b is positive, is the value of the expression positive or negative? 8. _____
9. Select the larger number: -0.676 , -0.667 9. _____
10. Write the following in symbols and then simplify the expression. 10. _____

*The product of 5 and -24 , divided
by the difference between -4 and 8.*

For Exercises 11 – 17, perform the indicated operations whenever possible. Leave all fractional answers in lowest terms.

11. $-9 + (-7 - 9) - (5 - 4)$ 11. _____
12. $3\frac{3}{4} - 5\frac{5}{8}$ 12. _____
13. $4 - [(-3 - 5) - (7 - 1)] - (-4)$ 13. _____
14. $-13 + (2)^3 + (10^2 - 6)$ 14. _____
15. $(-6)(-3) + 4(-7) + (-8)^2$ 15. _____
16. $\frac{16(-6 - 6)}{7(-8) - (6 - 16)(2 - 6)}$ 16. _____
17. $\frac{-8[2 - (-2 + 9)]}{-7[1 - (-7)] - 3(-22)}$ 17. _____

For Exercises 18 – 19, find the solution for each equation from the set $\{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$ by guessing or by trial and error.

18. $\frac{-24}{p} = -8$ 18. _____

19. $-5k + 4 = 29$ 19. _____

For Exercises 20 – 21, evaluate the expression, given $n = -2$ and $r = 4$.

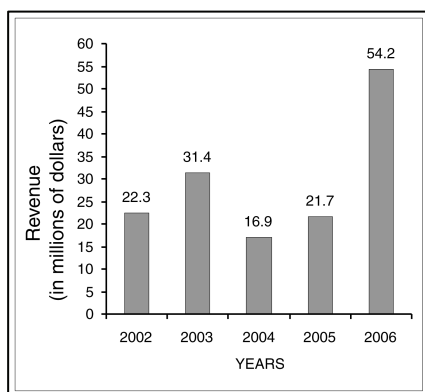
20. $3n^3 - 7r$ 20. _____

21. $\frac{-3n + 5r}{2(r - n) + 1}$ 21. _____

22. On August 15, the temperature in Houston, Texas was 99°F . On December 25, the temperature in Anchorage, Alaska was 123° lower. What was the temperature in Anchorage, Alaska on December 25? 22. _____

23. When calculating total GPA points, 4 points are awarded for each credit hour in which an A is earned, 3 points per credit hour for each B, 2 points per credit hour for each C, 1 point per credit hour for each D, and no points are awarded for F's. If a student has 11 credit hours worth of A's, 11 hours worth of B's, 12 credit hours worth of C's, 5 credit hours worth of D's, and 3 credit hours worth of F's, how many total GPA points does she have? 23. _____

24. The following bar graph shows the revenue, in millions of dollars, received by Summers Electronics Corporation during the years 2002 through 2006. Use a signed number to represent the change from 2005 to 2006. 24. _____



For Exercises 25 – 29, match the property in Column I with its example in Column II.

COLUMN I

COLUMN II

25. Associative A. $5z \cdot 6 = 6 \cdot 5z$ 25. _____

26. Commutative B. $15 + 5p = 5(3 + p)$ 26. _____

27. Distributive C. $(4)\left(\frac{1}{4}\right) = 1$ 27. _____

28. Identity D. $(3x + 4y) + 5z = 5z + (3x + 4y)$ 28. _____

29. Inverse E. $q \cdot 1 = q$ 29. _____

30. Use the distributive property to rewrite the expression.
Simplify if possible. 30. _____

$$4(5r) + 4(-3t)$$

31. Give an example of a number that does not have a
multiplicative inverse. 31. _____

In Exercises 32 – 33, simplify by combining like terms.

32. $5(7m - 1) - (m - 4) + 2(3m - 4)$ 32. _____

33. $-8c - 3c + 16c - 9c + c$ 33. _____

CHAPTER 1, FORM E

BEGINNING ALGEBRA

NAME: _____

SECTION: _____

For Exercises 1 – 3, choose the best answer.

1. Write $\frac{840}{5280}$ in lowest terms. 1. _____

- A. $\frac{5}{11}$ B. $\frac{7}{11}$ C. $\frac{7}{44}$ D. $\frac{5}{44}$

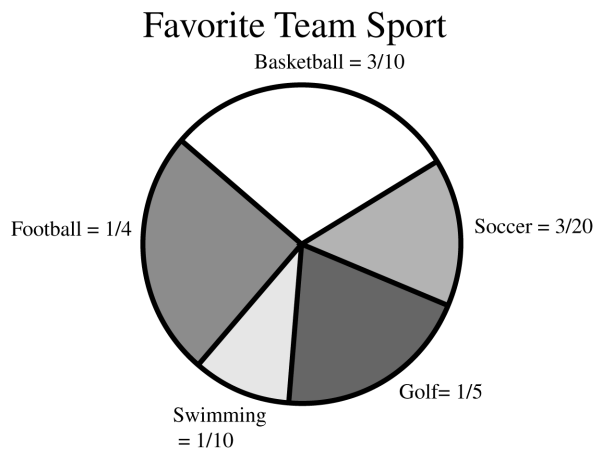
2. Add: $\frac{1}{6} + \frac{3}{8} + \frac{7}{12}$ 2. _____

- A. $\frac{9}{26}$ B. $\frac{9}{8}$ C. $\frac{3}{8}$ D. $\frac{1}{4}$

3. Divide: $\frac{8}{42} \div \frac{24}{45}$ 3. _____

- A. $\frac{5}{14}$ B. $\frac{32}{315}$ C. $\frac{1}{3}$ D. $\frac{42}{15}$

For Exercises 4 – 5 refer to the following pie chart.



4. What fractional part of all people surveyed chose soccer or swimming as their favorite team sport. 4. _____

- A. $\frac{1}{5}$ B. $\frac{1}{4}$ C. $\frac{7}{20}$ D. $\frac{9}{25}$

5. If 1050 people were surveyed, how many said that golf was their favorite sport? 5. _____

- A. 315 B. 210 C. 262 D. 200

For Exercises 6 – 7, decide whether each statement is true or false.

6. $3[-10 - 6(-7)] \geq 96$ 6. _____

A. True B. False

7. $\frac{17 + 3(1 + 2)}{4(2 - 1) - (-9)} < 2$ 7. _____

A. True B. False

For Exercises 8 – 9, select the smaller number from each list.

8. $-|8|, -(-5), -|-5|, -(-8)$ 8. _____

A. $-|8|$ B. $-(-5)$ C. $-|-5|$ D. $-(-8)$

9. $-.061, -6.1, -.601, -.61$ 9. _____

A. $-.061$ B. -6.1 C. $-.601$ D. $-.61$

For Exercises 10 – 11, write a numerical expression for the phrase and simplify.

10. The product of -8 and -9 , divided by the sum of -15 and 3 10. _____

A. 4 B. -36 C. 6 D. -6

11. 12 less than the difference between 9 and -1 11. _____

A. -15 B. -22 C. 2 D. -2

For Exercises 12 – 18, perform the indicated operations whenever possible.

12. $-9 - (3 - 10) + (-5)$ 12. _____

A. -7 B. -21 C. -5 D. 5

13. $-5\frac{1}{6} + 4\frac{3}{4}$ 13. _____

A. $5\frac{11}{12}$ B. $-\frac{5}{12}$ C. $-1\frac{1}{2}$ D. $-\frac{2}{3}$

14. $-10 - [-4 + (4 - 8)]$ 14. _____

A. -6 B. 10 C. 2 D. -2

15. $4^2 - (-5) - (3^2 - 4)$ 15. _____

A. 16 B. 8 C. -2 D. 1

16. $(-3)(-14) + 8(-2) + (-3)^2$ 16. _____
 A. 35 B. -67 C. 49 D. 67

17. $\frac{-3 - (-2)}{4(-5) + (3-5)(2-12)}$ 17. _____
 A. $\frac{1}{40}$ B. $-\frac{1}{40}$ C. $\frac{1}{8}$ D. Undefined

18. $\frac{-8[2 - (-3 + 10)]}{-7[2 - (-6)] - 6(-11)}$ 18. _____
 A. 5 B. 4 C. -5 D. Undefined

For Exercises 19 – 20, find the solution for each equation from the set $\{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$ by guessing or by trial and error.

19. $3y + 8 = -7$ 19. _____
 A. -2 B. 3 C. -3 D. -5

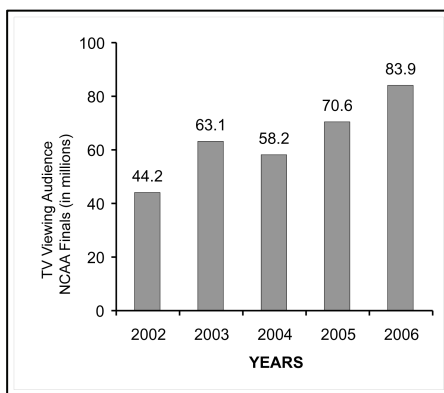
20. $-3x - 5 = 7$ 20. _____
 A. -5 B. 4 C. -4 D. -3

For Exercises 21 – 22, evaluate the expression, given $x = -4$ and $y = -3$.

21. $5x - 3y^2$ 21. _____
 A. -47 B. -73 C. 24 D. 0

22. $\frac{3x - 4y}{y - 3}$ 22. _____
 A. 4 B. 0 C. -4 D. Undefined

23. At 12 noon and 1:00 p.m. Brandi read a gauge in a lab where she works. The first reading was -2.58 and the second reading was -6.06. By how much did the reading increase or decrease? 23. _____
 A. Increased 3.48 B. Increased 6.64
 C. Decreased 3.48 D. Decreased 6.64



- A. -4.9 million B. 13.3 million
C. 39.7 million D. 12.4 million

For Exercises 25 – 29, select the letter of the property that matches each example.

- A. Associative B. Commutative C. Inverse D. Identity E. Distributive

- | | |
|--|-----------|
| 25. $-11+11=0$ | 25. _____ |
| 26. $3(4)+3(5)=3(4+5)$ | 26. _____ |
| 27. $(-13)(1)=-13$ | 27. _____ |
| 28. $3+(-5)=(-5)+3$ | 28. _____ |
| 29. $(7\cdot6)(9)=7(6\cdot9)$ | 29. _____ |
| 30. Use the distributive property to rewrite the expression. Simplify if possible. | 30. _____ |

$$-\frac{5}{8}(16a + 24b - 8c)$$

- A. $10a + 15b - 5c$ B. $-10a - 15b + 5c$
C. $-60a - 90b + 30c$ D. $-20abc$

In Exercises 31 – 32, simplify by combining like terms.

31. $6(2x-1)-(x-12)+2(3x-4)$ 31. _____

- A. $17x-2$ B. $15x-29$ C. $15x+7$ D. $15x-17$

32. $2(6a-1)-(2a-3)+3(7a-5)$ 32. _____

- A. $31a-9$ B. $31a-3$ C. $31a-20$ D. $31a-14$

33. If a is negative and b is positive, what can you determine about the value of the following expression? 33. _____

$$\frac{(a-b)(b-a)}{a \cdot b}$$

- A. Positive B. Negative
C. Zero D. Cannot be determined

CHAPTER 1, FORM F**BEGINNING ALGEBRA**

NAME: _____

SECTION: _____

For Exercises 1 – 3, choose the best answer.

1. Write $\frac{600}{8250}$ in lowest terms. 1. _____

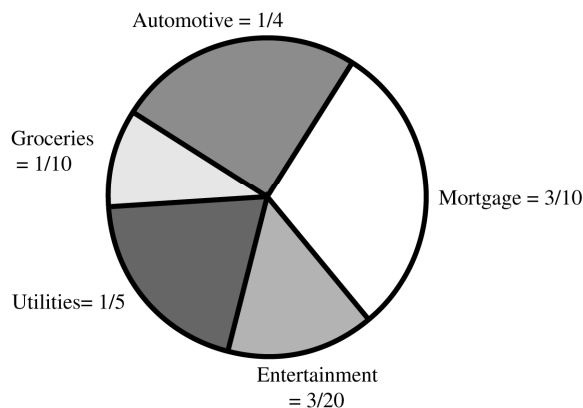
- A. $\frac{4}{11}$ B. $\frac{6}{11}$ C. $\frac{6}{55}$ D. $\frac{4}{55}$

2. Add: $\frac{1}{4} + \frac{5}{8} + \frac{1}{12}$ 2. _____

- A. $\frac{23}{24}$ B. $\frac{7}{23}$ C. $\frac{17}{24}$ D. $\frac{13}{12}$

3. Divide: $\frac{12}{64} \div \frac{24}{56}$ 3. _____

- A. $\frac{4}{7}$ B. $\frac{7}{16}$ C. $\frac{1}{2}$ D. $\frac{7}{4}$

For Exercises 4 – 5 refer to the following pie chart.**Mr. Bradley's Budget**

4. What fractional part of Mr. Bradley's budget is not used for groceries or entertainment? 4. _____

- A. $\frac{1}{4}$ B. $\frac{3}{4}$ C. $\frac{3}{10}$ D. $\frac{7}{10}$

5. If Mr. Bradley earns \$2100, how much does he spend on utilities? 5. _____

- A. \$420 B. \$525 C. \$210 D. \$630

For Exercises 6 – 7, decide whether each statement is true or false.

6. $4[-10 - 3(-7)] \leq 96$ 6. _____

A. True B. False

7. $\frac{27 + 3(1 + 2)}{4(5 - 3) - (-1)} > 2$ 7. _____

A. True B. False

For Exercises 8 – 9, select the larger number from each list.

8. $-|-5|, -(-12), -|12|, -(-5)$ 8. _____

A. $-|-5|$ B. $-(-12)$ C. $-|12|$ D. $-(-5)$

9. $-6.4, -.64, -.604, -.064$ 9. _____

A. -6.4 B. $-.64$ C. $-.604$ D. $-.064$

For Exercises 10 – 11, write a numerical expression for the phrase and simplify.

10. The product of -5 and -12 , divided by the sum of -5 and 1 10. _____

A. 15 B. -15 C. 30 D. -30

11. -7 less than the difference between 13 and -3 11. _____

A. 9 B. 23 C. 15 D. -1

For Exercises 12 – 18, perform the indicated operations whenever possible.

12. $-7 - (4 - 10) + (-5)$ 12. _____

A. 6 B. -18 C. -6 D. -4

13. $-5\frac{3}{8} + 6\frac{1}{4}$ 13. _____

A. $1\frac{7}{8}$ B. $-1\frac{7}{8}$ C. $5\frac{5}{8}$ D. $\frac{7}{8}$

14. $-10 - [-6 + (4 - 8)]$ 14. _____

A. -20 B. -8 C. -6 D. 0

15. $5^2 - (-4) - (2^3 - 6)$ 15. _____

A. 12 B. 19 C. 21 D. 27

16. $(-2)(-11) + 7(-5) + (-4)^2$ 16. _____
 A. 3 B. -29 C. 1 D. -73

17. $\frac{-5 - (-7)}{3(-4) + (5-6)(2-10)}$ 17. _____
 A. $\frac{1}{2}$ B. $-\frac{1}{2}$ C. $\frac{3}{5}$ D. 3

18. $\frac{-7[3 + (-4 + 6)] - 1}{-9[3 - (-5)] - 8(-9)}$ 18. _____
 A. $\frac{1}{3}$ B. -1 C. 1 D. Undefined

For Exercises 19 – 20, find the solution for each equation from the set $\{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$ by guessing or by trial and error.

19. $7y + 15 = -6$ 19. _____
 A. 1 B. -1 C. 3 D. -3

20. $-2x + 5 = -5$ 20. _____
 A. 5 B. -5 C. 0 D. 1

For Exercises 21 – 22, evaluate the expression, given $x = -4$ and $y = -3$.

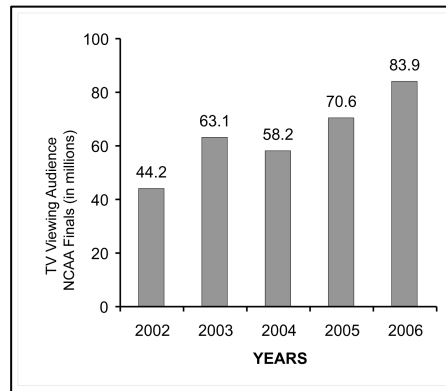
21. $3x^2 - 5y$ 21. _____
 A. -33 B. -57 C. 63 D. 15

22. $\frac{2x - 3y}{4 - x}$ 22. _____
 A. $\frac{1}{8}$ B. $-\frac{17}{8}$ C. $\frac{17}{8}$ D. Undefined

23. When a 33 mile per hour gust blows through Chicago on a day when the standing temperature is actually 5°F , the temperature of the air on a person's skin is 51°F colder due to the wind chill factor. What is the wind chill temperature? 23. _____
 A. -51°F B. -26°F C. -56°F D. -46°F

24. The following bar graph shows the approximate viewing audience, in millions, for the NCAA finals during the years 2002 through 2006. Use a signed number to represent the change in viewers from 2003 to 2004.

24. _____



- A. -12.4 million B. -26.4 million
C. -4.9 million D. -7.5 million

For Exercises 25 – 29, select the letter of the property that matches each example.

- A. Associative B. Commutative C. Inverse D. Identity E. Distributive

25. $4(5 + a) = 20 + 4a$ 25. _____

26. $-\frac{1}{4}(-4) = 1$ 26. _____

27. $9 + [(-2) + 5] = [9 + (-2)] + 5$ 27. _____

28. $0 + (-11) = -11$ 28. _____

29. $7(-8) = (-8)7$ 29. _____

30. Use the distributive property to rewrite the expression. Simplify if possible. 30. _____

$$-(-5a + 18b - 6c)$$

- A. $-5a + 18b - 6c$ B. $5a - 18b + 6c$
C. $5a - 18b - 6c$ D. $-7abc$

In Exercises 31 – 32, simplify by combining like terms.

31. $9(2x-3)-(12x-1)+2(3x-2)$ 31. _____

- A. $36x-32$ B. $36x-30$ C. $12x-32$ D. $12x-30$

32. $3(7m-1)-(m-3)+2(3m-3)$ 32. _____

- A. $26m$ B. $26m-6$ C. $26m-8$ D. $26m-14$

33. If a is negative and b is positive, what can you determine about the value of the following expression? 33. _____

$$\frac{(a \div b)(b \cdot a)}{(a - b)}$$

- | | |
|-------------|-------------------------|
| A. Positive | B. Negative |
| C. Zero | D. Cannot be determined |