

NUMBERS & OPERATIONS

_____ 1. Round 23.65 to the nearest tenth.

- a. 23.7 b. 23.6 c. 23.65 d. 23.66

_____ 2. Round 10.3413 to the nearest hundredth.

- a. 10.33 b. 10.34 c. 10.341 d. 10.35

_____ 3. Round 15.8787 to the nearest thousandth.

- a. 15.9 b. 15.88 c. 15.878 d. 15.879

_____ 4. Which of the following sets of decimals is in order from least to greatest?

- a. 4.613, 4.615, 4.62, 4.625 b. 5.23, 5.233, 5.238, 5.234
c. 6.08, 6.1, 6.091, 6.22 d. 7.92, 7.89, 8.1, 8.55

_____ 5. Which of the following sets of decimals is in order from least to greatest?

- a. 1.01, 1.001, 1.0001, 1.1 b. 2.34, 2.891, 2.888, 2.933
c. 3.001, 3.0091, 4.015, 4.03 d. 4.831, 4.967, 4.953, 5.234

_____ 6. For the day, Maya ate a granola bar with 210 calories, a sandwich with 480 calories, two cookies that are 130 calories each, and pasta with 570 calories. About how many calories did Maya consume?

- a. 1390 calories b. 1520 calories
c. 12,180 calories d. 12, 210 calories

_____ 7. Mike bought 5 cans of soup at \$0.99 each, 3 frozen dinners at \$2.79 each, and salad for \$2.75. About how much did he spend?

- a. \$6.53 b. \$10.49
c. \$16.07 d. \$12.11

_____14. If six pens cost \$8.70, how much does each pen cost?

- a. \$52.20 b. \$14.50
c. \$0.52 d. \$1.45

_____15. Which fraction is the smallest?

- a. $\frac{1}{2}$ b. $\frac{2}{3}$ c. $\frac{3}{4}$ d. $\frac{1}{5}$

_____16. Which fraction is the biggest?

- a. $\frac{3}{5}$ b. $\frac{1}{8}$ c. $\frac{3}{4}$ d. $\frac{5}{6}$

_____17. Which of the following sets of fractions is in order from least to greatest?

- a. $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}$ b. $\frac{1}{4}, \frac{2}{3}, \frac{3}{5}, \frac{4}{7}$
c. $\frac{1}{4}, \frac{1}{6}, \frac{1}{8}, \frac{1}{10}$ d. $\frac{1}{2}, \frac{2}{3}, \frac{4}{9}, \frac{9}{10}$

_____18. Sara bought $2\frac{1}{2}$ pounds of turkey and $3\frac{3}{4}$ pounds of ham. How much meat did she buy?

- a. $5\frac{4}{6}$ b. $5\frac{1}{2}$
c. 6 d. $6\frac{1}{4}$

_____19. Cindy filled her car with $11\frac{1}{2}$ gallons of gas the first week and $12\frac{1}{3}$ gallons the second week. How many gallons of gas did she buy?

- a. $23\frac{2}{5}$ b. $23\frac{3}{6}$
c. $23\frac{5}{6}$ d. $23\frac{1}{6}$

_____25. The cheerleading team brought 400 cookies to sell for a fund-raiser. Three-fourths of them sold. How many did they sell?

- a. 300
- b. 100
- c. 500
- d. 134

_____26. It took $\frac{3}{4}$ of an hour to walk 2 miles to school. What is his average rate of speed in miles per minute? (Hint use $d = rt$)

- a. 90
- b. $\frac{1}{45}$
- c. 45
- d. $\frac{2}{45}$

_____27. It took $\frac{2}{3}$ of an hour to walk 5 miles to school. What is his average rate of speed in miles per minute? (Hint use $d = rt$)

- a. 80
- b. 40
- c. $\frac{1}{16}$
- d. $\frac{1}{8}$

_____28. At a high school, $\frac{3}{5}$ of students participate in extra-curricular activities. Of these students, $\frac{2}{3}$ of them participate in sports. There are 3500 students attending this school. How many total students participate in sports?

- a. 2100
- b. 4433
- c. 1400
- d. 2333

_____29. At a college, $\frac{2}{5}$ of the students are in a sorority or fraternity. Of these students, $\frac{1}{5}$ of them have jobs. If there are 10,000 students, how many total students have jobs?

- a. 6000
- b. 4000
- c. 1000
- d. 800

_____30. Eighty five percent of Ms. Foresta's class passed the Chapter 9 Test. Express this percent as a fraction.

a. $\frac{17}{20}$ b. $\frac{15}{20}$

c. $\frac{8}{10}$ d. $\frac{19}{20}$

_____31. Seventy eight percent of seniors went to the prom. Express this percent as a fraction.

a. $\frac{34}{50}$ b. $\frac{78}{50}$

c. $\frac{23}{50}$ d. $\frac{39}{50}$

_____32. On Jacks last test he received a 13 out of 20. What percent of the questions did Jack answer correctly?

a. 65% b. 35%

c. 153% d. 61%

_____33. On Ms. Maddy's last test, twenty eight out of thirty five students passed. What percent of students failed?

a. 57% b. 43%

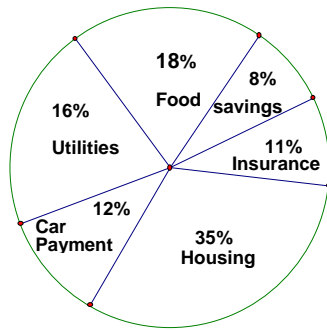
c. 80% d. 20%

_____34. What is 6% of 200?

a. 12 b. 120

c. 1200 d. 12000

_____ 35. The following circle graph shows the breakdown of Nicole's monthly budget. If Nicole earned \$3500 last month, how much did she put into savings?



- a. \$240
- b. \$280
- c. \$437
- d. \$28,000

_____ 36. The Comer's total monthly budget is \$4000 of which 15% is used for food, 50% is used for housing, 10% for utilities, 6% is used for entertainment, and 10% for transportation. If the remaining amount is invested, how much money do the Comer's invest monthly?

- a. \$360
- b. \$364
- c. \$400
- d. \$760

_____ 37. Matt's free-throw average for basketball season is 75%. Based on this average, how many free throws out of 40 can Mike be expected to make?

- a. 10
- b. 20
- c. 36
- d. 30

_____ 38. Matt purchased an iPod for \$210. The store has a sales tax rate of 7%. What was Matt's total purchase?

- a. \$14.70
- b. \$217.20
- c. \$224.70
- d. \$211

_____ 39. Mark worked eight hours yesterday. If Mark makes \$9.50 an hour plus 3% commission, how much will he make if he had \$430 in sales?

- a. \$121.00
- b. \$76.00
- c. \$133.90
- d. \$88.90

_____ 40. David bought the following items at the store:

1 gallon of milk	\$2.30
2 lbs of steak	\$7.45
1 package of potatoes	\$2.25
1 Ben & Jerry's Ice cream	\$3.80

If he paid 5% sales tax, what was the total cost of his purchase?

- a. \$15.80 b. \$16.59
c. \$23.25 d. \$24.41

_____ 41. Adam has borrowed \$800 from his bank for 2 years at an annual rate of 7%. Use the formula $I = prt$ to find the amount of interest he will pay. (I = Interest, p = principle, r = rate, and t = time)

- a. \$11.20 b. \$1.12
c. \$112.00 d. \$56.00

_____ 42. A snowboard is on sale for 29% off the original price. The original price of the board is \$395. What is the best estimate of the sale price of the coat?

- a. \$114.55 b. \$280.45
c. \$383.54 d. \$336.00

_____ 43. What is the total cost of a video game that has a 20% discount and sales tax is 5% if its original price is \$150?

- a. \$187.50 b. \$172.50
c. \$120.00 d. \$126.00

_____ 44. The original price of a pair of shoes is \$58. The store marked them up by 10%. Then they went on sale for 10% off. What is the current price?

- a. \$58.00 b. \$69.60
c. \$59.16 d. \$57.42

_____45. Kate purchased a snow board for \$625. The sales tax she paid was \$50. What was the sales tax rate?

- a. 0.08%
- b. 0.125%
- c. 5%
- d. 8%

_____46. Twenty five is what percent of two hundred?

- a. 12.5%
- b. 8%
- c. 50%
- d. 25%

_____47. Brian made \$700 commission on an \$8000 car. What percent commission did he receive?

- a. 8.75%
- b. 9.59%
- c. 5.6%
- d. 11.4%

_____48. Jasmine started a savings account with \$100. The first week she had it she withdrew \$15 and deposited \$50. The second week she had it she withdrew \$26. The third week she deposited \$75 and withdrew \$60. How much does she have left after the third week?

- a. \$326
- b. \$124
- c. \$126
- d. \$108

_____49. A submarine dives 540 feet below the surface of the ocean. If it climbs 250 feet, what is the depth of the submarine?

- a. -290 ft
- b. 290 ft
- c. -790 ft
- d. 790 ft

_____50. Simplify $8 + 4^2 \times 2 - 6$.

- a. 282
- b. 18
- c. 42
- d. 34

_____51. $2^3 + (7 + 2)^2 \div 3$.

- a. 35
- b. 29
- c. 20
- d. 56

- _____52. Which expression is equivalent to 36?
- a. $3 \times 17 - 5$ b. $3 \times 8 + 12$ c. $30 + 0 \times 6$ d. $3 \times 12 + 6$
- _____53. Which list of numbers is all prime numbers?
- a. {1, 2, 3, 5} b. {2, 3, 5, 7} c. {3, 5, 7, 9} d. {5, 7, 9, 11}
- _____54. In the repeating decimal $0.\overline{25348}$, what is the digit in the 15th decimal place?
- a. 2 b. 5 c. 4 d. 8
- _____55. In the repeating decimal $0.\overline{63851}$, what is the digit in the 24th decimal place?
- a. 3 b. 8 c. 5 d. 2
- _____56. It takes Mike 6 minutes to run a lap and it takes Kevin 4 minutes to run a lap. After how many minutes are they at the same point?
- a. 6 b. 12 c. 24 d. 36
- _____57. Three busses leave a station at the same time. One bus comes back in 8 minutes, the second in 6 minutes, and the third bus in 5 minutes. If the busses left at 11 a.m. then when is the next time they will all be at the station at the same time?
- a. 1 pm b. 3 pm c. 5 pm d. 6 pm

Numbers & Operations
Key

- | | | | | |
|-------|-------|-------|-------|-------|
| 1. A | 13. B | 25. A | 37. D | 49. A |
| 2. B | 14. D | 26. D | 38. C | 50. A |
| 3. D | 15. D | 27. D | 39. D | 51. B |
| 4. A | 16. D | 28. C | 40. B | 52. B |
| 5. C | 17. A | 29. D | 41. C | 53. B |
| 6. B | 18. D | 30. A | 42. B | 54. D |
| 7. C | 19. C | 31. D | 43. D | 55. C |
| 8. A | 20. B | 32. A | 44. D | 56. B |
| 9. C | 21. C | 33. D | 45. A | 57. A |
| 10. C | 22. D | 34. A | 46. A | |
| 11. A | 23. A | 35. B | 47. A | |
| 12. D | 24. B | 36. A | 48. B | |