Name:

Grade: School:

Write the answer in the box for each question \Math \ Grade 4 to Grade 8 \ Mr. Abdulkader Amro

Pretest

1. What fraction of the symbols below are not Γs?

Γ β Γ Γ Λ Γ Γ Γ β Λ Γ Γ

   a. $\frac{8}{12}$

   b. $\frac{1}{3}$

   c. $\frac{8}{4}$

   d. $\frac{4}{8}$

2. If a serving size of soda is 6 ounces, how many servings can a 33-ounce pitcher hold?

   a. 6 servings

   b. 6.3 servings

   c. 5.3 servings

   d. 5.5 servings

3. Change $7\frac{6}{8}$ into decimal.

   a. 7.68

   b. 7.75

   c. 7.6

   d. 7.34

4. What fraction has the largest value?

   a. $\frac{80}{120}$

   b. $\frac{800}{1,200}$

   c. $\frac{0.08}{0.012}$

   d. $\frac{0.8}{1.2}$

5. Convert $\frac{62}{8}$ into a mixed number.

   a. $7\frac{3}{4}$

   b. $8\frac{6}{8}$

   c. $7\frac{7}{8}$

   d. $6\frac{6}{8}$

6. How many thirds are contained in $\frac{28}{12}$?

   a. 36

   b. 84

   c. 7

   d. 48

7. $2\frac{4}{5} + 7\frac{11}{15} =$

   a. $9\frac{8}{15}$

   b. $10\frac{6}{15}$

   c. $10\frac{8}{15}$

   d. $9\frac{15}{20}$

8. $7 - 3\frac{4}{9} =$

   a. $4\frac{4}{9}$

   b. $4\frac{5}{9}$

   c. $10\frac{4}{9}$

   d. $3\frac{5}{9}$

9. $\frac{6}{7} - \frac{3}{5} =$

   a. $\frac{9}{35}$

   b. $\frac{3}{2}$

   c. $\frac{51}{35}$

   d. $\frac{3}{7}$

10. $\frac{7}{24} \times \frac{8}{21} =$

   a. $\frac{15}{504}$

   b. $\frac{15}{44}$

   c. $\frac{56}{63}$

   d. $\frac{1}{9}$

11. $5\frac{2}{3} \times 7 =$

   a. $35\frac{2}{3}$

   b. $39\frac{2}{3}$

   c. $39\frac{6}{7}$

   d. $35\frac{2}{21}$

12. $3\frac{3}{4} \times 6\frac{1}{2} =$

   a. $24\frac{3}{8}$

   b. $18\frac{4}{6}$

   c. $18\frac{3}{8}$

   d. $10\frac{1}{4}$

13. Paul's Pet Supply spends $20,000 a year renting warehouse space for inventory storage. If the total yearly operating cost for Paul's Pet Supply is $85,000, then what fraction of its operating costs is spent on warehouse storage?

   a. $\frac{4}{21}$

   b. $\frac{5}{17}$

   c. $\frac{4}{17}$

   d. $\frac{2}{85}$

14. Tristan needs $4\frac{3}{5}$ feet of ribbon to tie a bow around a box. If he only has $3\frac{1}{2}$ feet of ribbon, how much ribbon is he short?

   a. $1\frac{2}{3}$

   b. $\frac{5}{10}$

   c. $1\frac{2}{5}$

   d. $1\frac{1}{10}$

15. A recipe for chocolate delight cookies calls for two sticks of butter and makes six dozen cookies. If each stick contains 16 tablespoons of butter, approximately how much butter will be contained in each cookie?

   a. $\frac{4}{9}$ tablespoons

   b. $\frac{6}{16}$ tablespoons

   c. $\frac{16}{60}$ tablespoons

   d. $\frac{3}{4}$ tablespoons

16. Convert 100 inches into feet and inches.

   a. 8 feet and 3 inches

   b. 8 feet and 4 inches

   c. 8 feet and 5 inches

   d. 8 feet and 2 inches

17. What is 7,982.078264 rounded to the nearest thousandth?

   a. 7,982.078

   b. 7,982.0782

   c. 7,982.0783

   d. 8,000

18. Which is the largest number?

   a. 0.01709

   b. 0.018

   c. 0.009

   d. 0.0099

19. $7.084 + 11.90 + 0.012 =$

   a. 82.86

   b. 18.996

   c. 19.96

   d. 19.116

20. $4.9 - 0.073 =$
  a. 4.23
  b. 4.023
  c. 4.973
  d. 4.827

21. $8 - 4.02 + 0.08 =$
  a. 4.010
  b. 4.10
  c. 4.06
  d. 12.1

22. $0.54908 \times 10,000 =$
  a. 549.08
  b. 5,490.8
  c. 5,4908
  d. 5,49080

23. $8 \times 0.00757 =$
  a. 6.056
  b. 0.6056
  c. 0.06056
  d. 0.006056

24. Alice is driving from Salt Lake City to New York City. If the total distance is 2,173.84 miles, and she would like to get there in four days, how many miles will she need to average per day to make this trip?
  a. 543.46
  b. 543.26
  c. 544.06
  d. 544.36

25. 38% is equal to which of the following?
  a. 38
  b. 3.8
  c. $\frac{3}{8}$
  d. $\frac{19}{50}$

26. 1.75 is equal to what percent?
  a. 0.0175%
  b. 1.75%
  c. 17.5%
  d. 175%

27. What is 35% of 40?
  a. 10
  b. 12
  c. 14
  d. 16

28. 12 is what percent of 20?
  a. 58%
  b. 60%
  c. 62%
  d. 166%

29. If a state treasury collects $350,000,000 in tax revenue and then puts $134,750,000 toward education, what percentage of its revenue is going toward education?
  a. 38.5%
  b. 39.4%
  c. 40.2%
  d. 41.6%

30. Latoya earns $24,000 a year. Every month her rent payment is $680. What percentage of her yearly income does she spend on rent?
  a. 28%
  b. 30%
  c. 34%
  d. 36%

31. 432 is 80% of what number?
  a. 540
  b. 546
  c. 346
  d. 345.6

32. In January, gas cost $4.20 per gallon and in October it cost $3.57. By what percent did the price of gas decrease?
  a. 63%
  b. 22.75%
  c. 17.6%
  d. 15%

33. An architect draws plans for an office building where one centimeter represents 12 feet. If the height of the building is $14\frac{1}{2}$ centimeters in the architect's plans, how tall will the building be?
  a. 168.5 feet
  b. 174 feet
  c. 180 feet
  d. $26\frac{1}{2}$ feet

34. The pretzel to mixed nuts ratio for a party snack mix is 2:3. If Emily is going to make 7.5 cups of party mix, how many cups of pretzels will she need?
  a. 1.5 cups
  b. 3 cups
  c. 4.5 cups
  d. 5 cups

35. The speed of peak wind gusts measured on Mount Washington is represented in the following table. What was the average speed of the peak wind gusts during this period?

PEAK WIND GUSTS ON MOUNT WASHINGTON	
DAY	**PEAK WIND GUST (MPH)**
Monday	52
Tuesday	57
Wednesday	68
Thursday	87
Friday	41
Saturday	52

  a. 51 miles per hour
  b. 52 miles per hour
  c. 59.5 miles per hour
  d. 61 miles per hour

**36.** What are the median, mode, and mean of the following data set:
12, 12, 14, 20, 24, 26, 26, 26, 30, 30
  a. median = 26, mode = 25, mean = 25
  b. median = 26, mode = 25, mean = 22
  c. median = 24, mode = 30, mean = 26
  d. median = 25, mode = 26, mean = 22

37. A jar of writing instruments contains 12 black pens, 5 red pens, and 13 pencils. What is the probability that Sally will NOT get a red pen if she selects one writing instrument at random?
  a. $\frac{2}{5}$
 **b.** $\frac{13}{30}$
  c. $\frac{5}{30}$
  d. $\frac{5}{6}$

38. At Los Angeles International Airport, security personnel are instructed to randomly select $\frac{3}{12}$ of the cars entering the airport to check identification, and $\frac{1}{10}$ of the entering cars to search their trunks. If 60 cars entered the airport between 9:00 A.M. and 9:30 A.M., how many cars were allowed past the security personnel WITHOUT being stopped?

- **a.** 39 cars
- **b.** 45 cars
- **c.** 6 cars
- **d.** 15 cars

39. Angelica, Ashley, and Aimee go to play miniature golf together. The total bill for their groups comes to $23.25. If Aimee has a $10 bill to pay with, how much change should she get back from the other girls once the bill has been paid?

- **a.** $7.75
- **b.** $13.25
- **c.** $2.25
- **d.** $3.25

40. A virus attacks Damian's computer and he loses $\frac{5}{7}$ of the songs he had on his computer. If he is left with 172 songs, how many songs did he have before his computer was infected with the virus?

- **a.** 240
- **b.** 860
- **c.** 602
- **d.** 680

41. Twelve percent of students at Hither Hills High School live more than 10 miles from school. If there are 375 students in the high school, how many students live 10 miles or less from the school?

- **a.** 45
- **b.** 188
- **c.** 342
- **d.** 330

42. Maria works at a clothing store as a sales associate, making d dollars every hour, plus 20% commission on whatever she sells. If she works h hours and sells a total of s dollars of clothing, what will her pay for that day be?

- **a.** $d + 20$
- **b.** $d + 0.20s$
- **c.** $ds + 0.20$
- **d.** $d + 20s$

**43.** Which of the following is a scalene triangle?
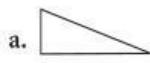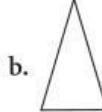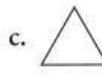
- **a.**
- **b.**
- **c.**
- **d.**

44. How many linear yards of fence would be needed to enclose a yard with the following shape (1 yard = 3 feet)?

32 ft.

12 ft.

22 ft.

14 ft.

10 ft.

18 ft.
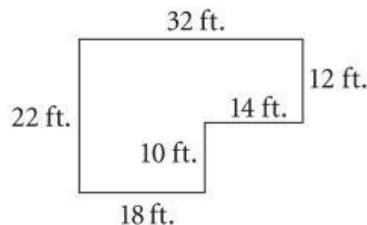
a. 36 yards
b. 52 yards
c. 98 yards
d. 108 yards

45. If the area of the following triangle is 120 square centimeters, what is the length of its base?

12
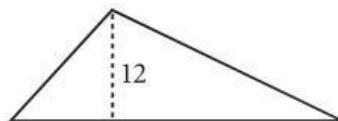
a. 10 centimeters
b. 18 centimeters
c. 20 centimeters
d. 100 centimeters

46. A piece of property is twice as long as it is wide. If the total perimeter of the property is 432 feet, how long is the property?
a. 144 feet
b. 108 feet
c. 124 feet
d. 72 feet

47. A square room needs exactly 196 square feet of carpet to cover its floor. Emily needs to calculate the perimeter of the room so that she can buy floor trim for the room. What is the room's perimeter?
a. 14 feet
b. 49 feet
c. 56 feet
d. 64 feet

48. Esteban is buying vinyl to cover his circular hot tub. If the diameter of the hot tub is 8 feet across, how many square feet of vinyl should he purchase to cover the circular top?
a. 86 square feet
b. 25 square feet
c. 201 square feet
d. 50 square feet

49. $15 - 5 \times 2 + 16 \div 2 =$
a. 10.5
b. 13
c. 18
d. 28

50. Barry has 4 feet 9 inches of rope, Ellen has 7 feet 10 inches of rope, and Paul has 2 feet 11 inches of rope. Together, how much rope do they have?
a. 13 feet 8 inches
b. 14 feet 5 inches
c. 15 feet 5 inches
d. 15 feet 6 inches