Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

Subject:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_\_\_\_

**6th Grade Unit 1: The Number System Post Test**

\_\_\_\_\_\_\_ (1) What is the greatest common factor of 16 and 28?

1. 2
2. 3
3. 4
4. 112

\_\_\_\_\_\_\_\_(2) Which set of numbers is listed in the correct order from greatest to least?

1. 0.33, 3.1 0.3
2. 0.3, 0.33, 3.1
3. 3.1, 0.3, 0.33
4. 3.1, 0.33, 0.3

\_\_\_\_\_\_\_ (3) Which string of factors below is not a factorization of 180?

1. 2 x 3 x 10 x 3
2. 23 x 32 x 5
3. 22 x 3 x 3 x 5
4. 2 x 15 x 6

\_\_\_\_\_\_\_ (4) Determine the prime factorization of the number, 168.

1. 23 x 33 x 7
2. 23 x 3 x 7
3. 24 x 3 x 7
4. 24 x 33 x 5

\_\_\_\_\_\_\_\_(5) 3/8 of students like math better than literacy. What is 3/8 written as a decimal?

1. 3.8
2. 0.375
3. 0.98
4. 0.65656565

\_\_\_\_\_\_\_ (6) Which number is divisible by 9 and 3?

1. 977
2. 1,800
3. 2,552
4. 428

\_\_\_\_\_\_\_ (7) Find the LCM of 6 and 21.

1. 42
2. 3
3. 84
4. 126

\_\_\_\_\_\_\_ (8) Which of the numbers listed below is a prime number?

1. 51
2. 53
3. 56
4. 57

\_\_\_\_\_\_\_\_(9) Two whole numbers have a least common multiple of 60.

* Each number is less than or equal to 12
* The greatest common factor of the two numbers is 2.

What are the two numbers?

1. 6 and 10
2. 5 and 12
3. 10 and 12
4. 12 and 15

\_\_\_\_\_\_\_\_(10) Which point on the number line below represents the number opposite the number $-5\frac{1}{2} ?$



1. Point P
2. Point Q
3. Point R
4. Point S

\_\_\_\_\_\_\_\_(11) Which fraction equals a repeating decimal?

1. 5/12
2. 3/16
3. 11/20
4. 9/50

\_\_\_\_\_\_\_\_(12) Four swimmers are entered into a competition. The first 3 the swimmers have had their turns. Their scores are 9.8 seconds, 9.75 seconds, and 9.81 seconds. The fourth swimmer won the competition. Which of the following must have been the fourth swimmer’s time?

1. 9.74 seconds
2. 9.82 seconds
3. 9.751 seconds
4. 9.80 seconds

\_\_\_\_\_\_\_ (13) Find the GCF of 32 and 56.

1. 32
2. 24
3. 224
4. 8

\_\_\_\_\_\_\_ (14) Alejandro and Jean are distributing erasers and pencils to the art class. There are 40 erasers and 25 pencils. Each student receives the same number of pencils and the same number of erasers, and no supplies are leftover. What is the greatest number of students in the class?

1. 10 students
2. 200 students
3. 65 students
4. 5 students

\_\_\_\_\_\_\_ (15) According to the distributive property, which of the following expressions are equivalent to 25 + 75?

1. 25(1 + 3)
2. (25 + 3) x 25
3. 25(1) + 150/2
4. 5 (5 + 70)

\_\_\_\_\_\_\_\_(16) Which inequality below shows a true statement?

 A. –4 > –1

 B. –4 < –3

 C. 2 < –5

 D. 0 > 3

\_\_\_\_\_\_\_ (17) Identify all of the factors of the number 60.

1. 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
2. 1, 2, 4, 5, 10, 20
3. 1, 2, 3, 4, 7, 14, 15, 20, 30, 60
4. 1, 2, 3, 4, 5, 10

\_\_\_\_\_\_\_\_(18) What is the fraction equivalent to 0.16?

1. 16/10
2. 4/25
3. 2/12
4. 1/25

\_\_\_\_\_\_\_ (19) Which of the following numbers is a composite number?

1. 52
2. 23
3. 67
4. 43

\_\_\_\_\_\_\_ (20) Use the distributive property to determine which expression is equivalent to 8(2 + 3).

1. 8(2) + 3
2. 8(2) + 8(3)
3. 82 + 83
4. 8(2) x 8 (3)

\_\_\_\_\_\_\_\_(21) Which list shows the fractions in order from least to greatest?

1. 3/10, 1/2, 2/5
2. 1/2, 2/5, 3/10
3. 2/5, 3/10, 1/2
4. 3/10, 2/5, 1/2

\_\_\_\_\_\_\_ (22) Evaluate 21 + 6 (16/4) - 22

1. 27
2. 104
3. 41
4. 92

\_\_\_\_\_\_\_\_(23) Which set of numbers is listed in the correct order from least to greatest?

1. 0.052, 0.38, 0.25
2. 0.048, 0.062, 0.19
3. 0.93, 0.08, 0.091
4. 0.07, 0.064, 0.64

\_\_\_\_\_\_\_ (24) A local bakery celebrated its one-year anniversary on Saturday. On that day, every 4th customer received a free cookie. Every 6th customer received a free muffin. Which customer was the first person to receive both free giveaways?

1. The 8th customer
2. The 24th customer
3. The 12th customer
4. The 6th customer

\_\_\_\_\_\_\_\_(25) While working in a mine, Paul and his crew mined ore at different levels beneath the earth’s surface throughout the week. On Monday, the crew worked at –200 feet. On Tuesday, they worked at –165 feet and on Wednesday they worked at –180 feet. List the depths at which they worked in order from deepest to shallowest.

1. –165, –180, –200
2. –180, –165, –200
3. –200, –185, –165
4. –200, –165, –180

\_\_\_\_\_\_\_\_(26) There are many small birds all over the world. The American phalarope is 2/3 ft. long, the African cuckoo is 3/4 ft. long, the Eurasian skylark is 7/12 ft. long, and the Dusky Conure is 5/6 ft. long. Which of these birds is the smallest?

1. American phalarope
2. Eurasian skylark
3. African cuckoo
4. Dusky Conure

\_\_\_\_\_\_\_\_(27) Which inequality represents the comparison of the two numbers plotted on the number line below?

1. a < b
2. b < a
3. a > b
4. a = b

\_\_\_\_\_\_\_ (28) Lucy has 56 bags of skittles, 49 packs of starburst and 63 tootsie rolls. She is creating goody bags for a birthday party. She wants to put an equal number of each candy into each goody bag. What is the greatest number of goody bags Lucy can create?

1. 8 bags
2. 7 bags
3. 9 bags
4. 2 bags

\_\_\_\_\_\_\_\_(29) Which of the following statements is false?

1. 3/6 > 2/4
2. 6/12 < 3/4
3. 2/4 < 7/8
4. 3/4 > 3/5

\_\_\_\_\_\_\_ (30) Evaluate: 500 ÷ 53[3 + (12 – 1)]

1. 13
2. 56
3. 60
4. 23

\_\_\_\_\_\_\_\_(31) Which list correctly places these integers in order from greatest to least?

1. 0, $\left|-3\right|$, -1, $\left|1\right|$
2. $\left|-3\right|, \left|1\right|, 0, -1, -3$
3. -3, 0, 1, -1, $\left|3\right|$
4. $\left|1\right|, \left|-3\right|, 0, -1, -3$

\_\_\_\_\_\_\_\_(32) A postal worker walked 4.53 miles on Tuesday, 4.5 miles on Wednesday, 3.75 miles on Thursday, and 4.25 miles on Friday. Which two days did she walk the farthest?

1. Tuesday & Wednesday
2. Wednesday & Thursday
3. Tuesday & Thursday
4. Tuesday & Friday

\_\_\_\_\_\_\_ (33) What is the LCM of 2, 3, & 6?

1. 12
2. 6
3. 3
4. 2

\_\_\_\_\_\_\_\_(34) Which set of numbers is listed in the correct order from least to greatest?

1. –0.042 , –0.4 , –0.04
2. –0.4 , –0.04 , –0.042
3. –0.04 , –0.042 , –0.4
4. –0.4 , –0.042 , –0.04

\_\_\_\_\_\_\_\_(35) The inequality below compares two rational numbers.

$$-\frac{8}{18}> - \frac{17}{27}$$

If two numbers were plotted as values on a horizontal number line, which statement would be true?

1. Both numbers lie to the right of 0, and $-\frac{8}{18}$ lies to the left of $- \frac{17}{27}$
2. Both numbers lie to the left of 0, and $-\frac{8}{18}$ lies to the left of $- \frac{17}{27}$
3. Both numbers lie to the right of 0, and $-\frac{8}{18}$ lies to the right of $- \frac{17}{27}$
4. Both numbers lie to the left of 0, and $-\frac{8}{18}$ lies to the right of $- \frac{17}{27}$