MATH MIDTERM UNIT TEST 2 DO NOT WRITE ON TEST BOOKLET!!

Solve each problem completely. Choose the letter of the correct answer.

1} $4[(15-9)+8(2)^2]$

a. 192
c. 152
b. 263
d. 247

2} $\frac{53+15}{17-13}$

a. 17
c. 24.5
b. 40.88
d. 17.09

Match the property with the example.

3}

____ Identity Property of Addition
____ Multiplicative Property of Zero
____ Commutative Property of Multiplication
____ Distributive Property
____ Inverse Property of Multiplication

a} 7 (14+2) = (7x14)+(7x2)
b} 17 x 0 = 0
c} -2 x 2 = -4
d} 17 + 0 = 17
e} 8 x 2 = 2 x 8

Evaluate completely the exponents below.

4} $9^3 \bullet (9^2)^3$

a. 9^{18}
c. 387,420,489
b. 9^6
d. 9^9

5} $\frac{-55x^2y}{11xy^3z^2}$

a. $\frac{-55x}{y^2z^2}$
c. $\frac{-55x}{y^2z^3}$
b. $\frac{-5x}{y^2z^2}$
d. $\frac{-5x}{y^2z^3}$

Standard Form		Scientific Notation	
6}	27,210,000	**7}**	
7}		**8}**	8.2549×10^{6}
8}	0. 00004673	**9}**	

In the table above, the correct answer for number 6 is:

a. 22.721×10^{7} c. 2.721×10^{1}

b. 27.21×10^{7} d. 2.721×10^{7}

In the table above, the correct answer for number 7 is:

a. 8,253,900 c. .00000082549

b. .0000082549 d. 825,390

In the table above, the correct answer for number 8 is:

a. 4.673×10^{5} c. 4.673×10^{-5}

b. 46.73×10^{-5} d. 46.73×10^{5}

For each number listed in the left column, choose A for Natural, B for Whole, C for Integers, D for Rational, and E for Irrational. If there is more than one fill in more than one bubble.

Number	Natural	Whole	Integers	Rational	Irrational
9} $0.\overline{3}\cdot$					
10} $\frac{3}{4}$					
11} 25					
12} -0.011238…					

Solve each of the problems below. If the answer on the left is greater than the answer on the right, choose A for "G"; if the answer on the left is less than the answer on the right, B for "L"; if the right and left answers are the same or equivalent, choose C for the equal (=) sign.

13}

|-18| - |5| **a.) G** -|4|.|-5|
b.) L
c.) =

14}

-17+8+(-14) **a.) G** -35 – (-18)
b.) L
c.) =

15}

$\frac{156\div(-2)}{26}$ **a.) G** **b.) L** **c.) =** $\frac{-9(3)}{9}$

16}

If t = 15 **a.) G** If k
b.) L = -16
-6t **c.) =** -4k

For the set of numbers, choose GCF and the LCM.

10 x^2y^3 **and** $25xy^2$

17} GCF

a. $5xy^3$

b. $10x^1y^5$

c. $5xy^2$

d. $10xy^2$

18} LCM

a. $5x^2y^3$

b. $50x^2y^3$

c. $25x^2y^3$

d. $100x^1y^3$

Solve the problems below.

Mrs. X is having a birthday party for her daughter and son. They each went to the store to choose candy for the goodie bags. They bought 48 Snicker bars, 60 bags of M&M's candies and 32 Blow-pops. When they make the goodie bags, how many of each type of candy will go in each bag and how many bags will they be able to make?

HOW MANY OF EACH TYPE OF CANDY?

19} Snicker Bars

a. 24

b. 6

c. 48

d. 12

20} M & M's

a. 12

b. 10

c. 60

d. 15

21}Blow-pops

a. 8

b. 12

c. 4

d. 32

22} HOW MANY BAGS?

a. 6

b. 10

c. 4

d. 12

23} The Panther team is having a party for Halloween. The guests of this party ate $0.\overline{7}$ of the pizza that was ordered. What would be the fraction representation of this decimal?

a. $\frac{7}{1}$

b. $\frac{7}{9}$

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

d. $\frac{6}{9}$

24} The Panther team had practice where 15 out of 22 teammates needed to wear red shirts. What is the decimal representation of this fraction?

a. .330
b. 0.68
c. $0.\overline{681}$
d. $0.6\overline{81}$

Write the ratio in simplest, fraction form:

25} 15 : 35

a. $\frac{3}{7}$
b. $\frac{15}{35}$
c. $\frac{7}{3}$
d. $\frac{35}{15}$

Write the unit rate for the following:

26} $\frac{\$320}{4\ people}$

a. $\frac{\$3}{1\ person}$
b. $\frac{\$1}{0.0125\ people}$
c. $\frac{\$80}{2\ people}$
d. $\frac{\$80}{1\ person}$

Solve the proportion below.

27} $\frac{6}{X} = \frac{17}{51}$

a. 306
b. 0.3…
c. 18
d. 36

Complete the chart.

Fraction	Decimal	Percent
$\frac{3}{50}$	**28}** a.) 0.6 b.) 0.06 c.) 6 d.) 0.03	**29}** a} 3% b) 30% c) 60% d) 6%
30} a.) $\frac{6}{10}$ b) $\frac{.6}{100}$ c) $\frac{3}{5}$ d) $\frac{.6}{10}$	0.6	**31}** a) 6% b) 60% c) 600% d) .6%
32} a) $\frac{16}{25}$ b) $\frac{16}{100}$ c) $\frac{4}{25}$ d) $\frac{4}{100}$	**33}** a) .16 b) 16 c) 1.6 d).016	16%

Complete each equation.

34} 42% OF 68 IS _____

a. 2856
c. 2.856
b. 285.6
d. 28.56

35} 90% OF _____ IS 85.5

a. 8550
c. 90
b. 101
d. 95

Solve each problem below.

36} Martha bought rollerblades that had been discounted 60%. If they originally cost $240, how much will she be paying now?

a. $144
c. $200
b. $96
d. $95

37} A jacket costs $135.00 and there is a 6.5% sales tax. What is the total cost of the jacket?

a. $143.78
c. $126.22
b. $8.78
d. $100.78

38} What is the interest earned on $2,460 if it is invested at 6.25% for 3.5 years.

a. $53812.50
c. $538.13
b. $538.12
d. $538.23

39} A $545.00 speaker now sells for $393.75. Find the percent of change. (rounded to the thousandths place)

a. 0.278
c. 27.8%
b. -0.278
d. -27.8%

40} Max invests $200 in a vacation savings plan, which will earn 12% interest compounded monthly. If he keeps his money invested for half of a year, how much will he have saved for a vacation?

a. $200.10
c. $12,800
b. $212.30
d. $100

Match the names or words with the images

41} Point R
42} Line AB
43} Ray LM
44} Plane ABC
45} Bisector