

# Middle School Number Sense Exam 022, 10/14/2017

- (1)  $\frac{17}{200} =$  \_\_\_\_\_ (decimal)
- (2)  $13 \times 23 =$  \_\_\_\_\_
- (3)  $156 \div 13 =$  \_\_\_\_\_
- (4)  $\frac{8}{11} \times \frac{5}{4} =$  \_\_\_\_\_ (fraction)
- (5)  $101 \times \frac{3}{4} =$  \_\_\_\_\_ (mixed number)
- (6)  $945 \times 11 =$  \_\_\_\_\_
- (7)  $994 + 2993 =$  \_\_\_\_\_
- (8)  $\frac{4}{13} \times 78 =$  \_\_\_\_\_
- (9)  $246 + 377 =$  \_\_\_\_\_
- \*(10)  $1726 + 3825 + 537 + 86 =$  \_\_\_\_\_
- (11)  $97 \times 91 =$  \_\_\_\_\_
- (12)  $76 \times 74 =$  \_\_\_\_\_
- (13)  $11^2 =$  \_\_\_\_\_ (Roman Numeral)
- (14)  $\frac{9}{24} + \frac{3}{8} + \frac{6}{16} =$  \_\_\_\_\_
- (15)  $11\frac{1}{3}\% =$  \_\_\_\_\_ (fraction)
- (16)  $\frac{3}{8} + \frac{1}{2} + \frac{1}{4} =$  \_\_\_\_\_
- (17)  $66 \times 46 =$  \_\_\_\_\_
- (18)  $12^2 =$  \_\_\_\_\_
- (19)  $4 \times 3 \times 2 \times 1 \times 0 =$  \_\_\_\_\_
- \*(20)  $248 \times 1732 =$  \_\_\_\_\_
- (21) The cost of renting scaffolding for 5 days at \$23.50 per day \$ \_\_\_\_\_
- (22) The mode of 1, 11, 11, 1, 11, 1, 11, 1, and 11 is \_\_\_\_\_
- (23)  $73 \times 67 =$  \_\_\_\_\_
- (24)  $64 \times 18 - 61 \times 18 =$  \_\_\_\_\_
- (25)  $12 + (-3) - 7 =$  \_\_\_\_\_
- (26)  $42 \times 0.6666\dots =$  \_\_\_\_\_
- (27) The reciprocal of 1.7 is \_\_\_\_\_ (fraction)
- (28) The median of 5, 9, 13, 12, 6, and 1 is \_\_\_\_\_
- (29) Find the number of prime numbers that are less than 25. \_\_\_\_\_
- \*(30)  $495 \times 192 =$  \_\_\_\_\_
- (31) If 8 pens cost \$2.25 then 2 dozen pens cost \$ \_\_\_\_\_
- (32)  $115 \times 106 =$  \_\_\_\_\_
- (33) The area of a triangle with base 15 in. and height 8 in. is \_\_\_\_\_ sq. in.
- (34) The sum of the first 13 odd integers exceeds the sum of the first 12 even integers by \_\_\_\_\_
- (35) If  $14x + 21 = 105$ , then  $2x + 3 =$  \_\_\_\_\_
- (36) The discount on a \$320 item on sale for 30% off is \$ \_\_\_\_\_
- (37) If the area of a circle with diameter 8 cm is  $a\pi$  sq. cm., then  $a =$  \_\_\_\_\_
- (38) If a \$50 pair of jeans is on sale for 20% off, how much is the sales price? \$ \_\_\_\_\_
- (39)  $92 \times 99 =$  \_\_\_\_\_
- \*(40)  $5.7 \times 392 =$  \_\_\_\_\_
- (41)  $56_{10} =$  \_\_\_\_\_ <sub>8</sub>
- (42)  $\frac{1}{3}$  gallon = \_\_\_\_\_ cu. inches
- (43) 25% of 37 is 12.5% of \_\_\_\_\_
- (44)  $\frac{16}{14} \times 16 =$  \_\_\_\_\_ (mixed number)

- (45)  $51^2 - 49^2 =$  \_\_\_\_\_
- (46)  $11_3 =$  \_\_\_\_\_  $_{10}$
- (47) The ordinate of the  $y$ -intercept of the line  
 $13x + 5y = 0$  is \_\_\_\_\_
- (48)  $19 \times 16 + 21 \times 16 =$  \_\_\_\_\_
- (49)  $\frac{37}{40} =$  \_\_\_\_\_ (decimal)
- \*(50)  $592 \div 2.2 =$  \_\_\_\_\_
- (51)  $51 \times 66\frac{2}{3} =$  \_\_\_\_\_
- (52)  $122_4 =$  \_\_\_\_\_  $_{10}$
- (53)  $2 \text{ ft.} \times 27 \text{ ft.} \times 5 \text{ ft.} =$  \_\_\_\_\_ sq. yards
- (54)  $13 \times 86 =$  \_\_\_\_\_
- (55) The number of unique diagonals that can be drawn  
from one vertex of a pentagon is \_\_\_\_\_
- (56) 210 has \_\_\_\_\_ unique, prime factors
- (57) The distance between  $(2, -3)$  and  $(-6, 3)$  is \_\_\_\_\_
- (58)  $23 \times \frac{26}{29} =$  \_\_\_\_\_ (mixed number)
- (59)  $6 \text{ ft.} \times 8 \text{ ft.} \times 9 \text{ ft.} =$  \_\_\_\_\_ cu. yards
- \*(60) The surface area of a sphere with radius  
9 in. is \_\_\_\_\_ sq. in.
- (61) If  $\log_x 27 = 3$ , then  $x =$  \_\_\_\_\_
- (62)  $0.8666\dots =$  \_\_\_\_\_ (fraction)
- (63)  $\frac{4}{7} + \frac{7}{4} =$  \_\_\_\_\_ (mixed number)
- (64) The positive geometric mean between  
40 and 10 is \_\_\_\_\_
- (65) What is the probability of choosing a triangular  
number from the first 10 counting numbers? \_\_\_\_\_
- (66)  $8^2 + 16^2 =$  \_\_\_\_\_
- (67)  $8! \div 6! =$  \_\_\_\_\_
- (68)  $235 \times 111 =$  \_\_\_\_\_
- (69) If  $\sqrt{7x - 3} = 1$ , then  $x =$  \_\_\_\_\_
- \*(70)  $\sqrt{532} \times \sqrt{568} =$  \_\_\_\_\_
- (71)  $45_7 + 22_7 =$  \_\_\_\_\_  $_7$
- (72) 4 books can be arranged on a shelf  
in \_\_\_\_\_ different ways
- (73)  $i^{62} =$  \_\_\_\_\_
- (74) If  $\log_9 18 + \log_9 x = 2$ , then  $x =$  \_\_\_\_\_
- (75) The area of a trapezoid with bases 14 and 20 and  
a height of 5 is \_\_\_\_\_
- (76)  $306^2 =$  \_\_\_\_\_
- (77) The remainder of  $26^2 \div 4$  is \_\_\_\_\_
- (78)  $3x - 5y = C$  has a  $y$ -intercept of 20, then  $C =$  \_\_\_\_\_
- (79) The sum of the roots of  
 $9x^2 - 16 = 0$  is \_\_\_\_\_
- \*(80)  $\sqrt[3]{12000} =$  \_\_\_\_\_