

# Middle School Number Sense Exam 01, 5/18/2017

- (1)  $1992 + 989 =$  \_\_\_\_\_
- (2)  $643 - 346 =$  \_\_\_\_\_
- (3)  $12 + 19 + 7 + 8 + 13 + 1 =$  \_\_\_\_\_
- (4)  $26 \times 303 =$  \_\_\_\_\_
- (5)  $11^2 =$  \_\_\_\_\_
- (6)  $.065 =$  \_\_\_\_\_ %
- (7)  $3527 \times 11 =$  \_\_\_\_\_
- (8)  $1.1 \times 4.76 =$  \_\_\_\_\_ (decimal)
- (9)  $\frac{28}{49}$  reduced to lowest terms is \_\_\_\_\_
- \*(10)  $\frac{1}{7} \times 6789 =$  \_\_\_\_\_
- (11)  $3\frac{5}{9}\%$  = \_\_\_\_\_ (fraction)
- (12)  $1 + 3 + 5 + \dots + 11 + 13 =$  \_\_\_\_\_
- (13)  $48 \times 68 =$  \_\_\_\_\_
- (14)  $63 \times 66\frac{2}{3} =$  \_\_\_\_\_
- (15) Which is larger:  $-\frac{3}{11}$ ,  $-\frac{5}{18}$ ? \_\_\_\_\_
- (16)  $111 \times 413 =$  \_\_\_\_\_
- (17)  $85^2 =$  \_\_\_\_\_
- (18)  $124 \times 75 =$  \_\_\_\_\_
- (19) Which is larger:  $\frac{9}{31}$  or  $0.3$ ? \_\_\_\_\_
- \*(20)  $62 \times 34 \times 2 =$  \_\_\_\_\_
- (21) The LCM of 22 and 77 is \_\_\_\_\_
- (22) If one dozen markers cost \$3.48, then one marker costs \_\_\_\_\_ cents
- (23) If  $78 = 3(2a + 4)$ , then  $a =$  \_\_\_\_\_
- (24) Find the number of prime numbers that are between 80 and 92. \_\_\_\_\_
- (25) The area of a rectangle with length  $\frac{1}{4}$  ft and width  $\frac{1}{5}$  ft is \_\_\_\_\_ sq. ft
- (26) If 10 pens cost \$5.90, then 4 pens cost \$ \_\_\_\_\_
- (27)  $12\frac{1}{2} \times 32 =$  \_\_\_\_\_
- (28)  $24 \times 16\frac{2}{3} =$  \_\_\_\_\_
- (29) The area of a rhombus with diagonals 22 ft. and 18 ft. is \_\_\_\_\_ sq. ft.
- \*(30)  $4444 \times 77 =$  \_\_\_\_\_
- (31) The sum of the positive integral divisors of 15 is \_\_\_\_\_
- (32) If Deonte invests \$2000 at 6% interest for two years, how much interest will he earn? \$ \_\_\_\_\_
- (33)  $19\frac{3}{7} \times 19\frac{4}{7} =$  \_\_\_\_\_ (mixed number)
- (34)  $11\frac{3}{8} \times 11\frac{5}{8} =$  \_\_\_\_\_ (mixed number)
- (35) If  $\frac{7}{2} = \frac{x}{7}$ , then  $x =$  \_\_\_\_\_
- (36) 65200 millimeters = \_\_\_\_\_ dekameters
- (37) 28 has how many positive integral divisors? \_\_\_\_\_
- (38)  $55^2 =$  \_\_\_\_\_
- (39)  $52 \times 7 + 8 \times 7 =$  \_\_\_\_\_
- \*(40) 35% of 78% of 6000 is \_\_\_\_\_
- (41) A regular decagon has an interior angle of \_\_\_\_\_ measure \_\_\_\_\_ degrees
- (42) The diameter of a circle with area  $\pi m^2$  is \_\_\_\_\_ meters
- (43)  $2 + 3 + 4 + \dots + 20 =$  \_\_\_\_\_

- (44) The simple interest on \$13,000 at 8% interest for 6 months is \$ \_\_\_\_\_
- (45)  $100 + 99 + 98 + \dots + 2 + 1 =$  \_\_\_\_\_
- (46) One acre = \_\_\_\_\_ square miles
- (47) If  $\frac{1}{25} + \frac{1}{4} = \frac{1}{x}$ , then  $x =$  \_\_\_\_\_
- (48)  $50 \times 19 =$  \_\_\_\_\_
- (49) The largest palindrome smaller than 271 is \_\_\_\_\_
- \*(50)  $25 \times 142857 =$  \_\_\_\_\_
- (51) The slope of the line  $y = \frac{2}{3}x + 4$  is \_\_\_\_\_
- (52)  $56^2 \div 4$  has a remainder of \_\_\_\_\_
- (53) The diameter of a circle with area  $81\pi$  sq. cm. is \_\_\_\_\_ cm.
- (54) The sum of the complement and the supplement of a  $53^\circ$  angle is \_\_\_\_\_  $^\circ$
- (55) If  $f(x) = x^3 + x^2$ , then  $f(-2) =$  \_\_\_\_\_
- (56)  $-12^0 =$  \_\_\_\_\_
- (57)  $6^2 + 18^2 =$  \_\_\_\_\_
- (58) 40 acres = \_\_\_\_\_ miles
- (59)  $\frac{12}{13} \times 12 =$  \_\_\_\_\_ (mixed number)
- \*(60) 30% of 80% of 14753 = \_\_\_\_\_
- (61) 270 minutes = \_\_\_\_\_ hours
- (62)  $25^\circ$  Celsius = \_\_\_\_\_  $^\circ$ Fahrenheit
- (63)  $5! =$  \_\_\_\_\_
- (64) If  $55_b = 40_{10}$ , then  $b =$  \_\_\_\_\_
- (65)  $123 \times 9 + 4 =$  \_\_\_\_\_
- (66) The number of positive, proper fractions in lowest terms with denominator 16 is \_\_\_\_\_
- (67)  $43 \times 26 =$  \_\_\_\_\_
- (68)  $.272727\dots =$  \_\_\_\_\_ (fraction)
- (69)  $995 \times 998 =$  \_\_\_\_\_
- \*(70)  $\sqrt[3]{550000} =$  \_\_\_\_\_
- (71)  $5^5 \times 2^4 =$  \_\_\_\_\_
- (72)  $6\frac{1}{3} \times 9\frac{2}{3} =$  \_\_\_\_\_ (mixed number)
- (73)  $i^{19} =$  \_\_\_\_\_
- (74) Find the length of a side of a rhombus if the lengths of the two diagonals are 24 and 10. \_\_\_\_\_
- (75)  $96 \times 16\frac{2}{3} =$  \_\_\_\_\_
- (76)  $995 \times 997 =$  \_\_\_\_\_
- (77)  $45_7 + 22_7 =$  \_\_\_\_\_ <sub>7</sub>
- (78) If  $(x - 9)(x + 4) = x^2 + bx - 36$ , then  $b =$  \_\_\_\_\_
- (79)  $i^{44} =$  \_\_\_\_\_
- \*(80)  $15842 \div 23 =$  \_\_\_\_\_