

# Middle School Number Sense Exam 049, 11/2/2018

- (1)  $297 \div 9 =$  \_\_\_\_\_
- (2)  $0.72 =$  \_\_\_\_\_ (fraction)
- (3)  $8 \times 7.5 =$  \_\_\_\_\_
- (4)  $463 + 195 =$  \_\_\_\_\_
- (5)  $\frac{7}{9} \times 360 =$  \_\_\_\_\_
- (6)  $30 + 33 + 36 + 39 + 42 =$  \_\_\_\_\_
- (7)  $\overline{.24} =$  \_\_\_\_\_ (fraction)
- (8)  $98765 \div 3$  has a remainder of \_\_\_\_\_
- (9)  $1345 - 866 =$  \_\_\_\_\_
- \*(10)  $93 + 73 + 53 + 53 + 13 + 63 =$  \_\_\_\_\_
- (11) DLXII = \_\_\_\_\_ (Arabic Numeral)
- (12)  $(3 \times 1000) + (3 \times 100) - (3 \times 10) + (3 \times 1) =$  \_\_\_\_\_
- (13)  $\frac{6}{18} + \frac{6}{27} + \frac{4}{9} =$  \_\_\_\_\_
- (14)  $58 \times 52 =$  \_\_\_\_\_
- (15)  $24^2 =$  \_\_\_\_\_
- (16)  $37 \times 77 =$  \_\_\_\_\_
- (17) 659 = \_\_\_\_\_ (Roman Numeral)
- (18) MCDIX = \_\_\_\_\_ (Arabic Number)
- (19) .0075 kilograms - 4 grams = \_\_\_\_\_ grams
- \*(20)  $8888 \div 3.7 =$  \_\_\_\_\_
- (21) If  $2(x + 5) = 24$ , then  $x =$  \_\_\_\_\_
- (22)  $22222 \div 9$  has a remainder of \_\_\_\_\_
- (23)  $136 \div 17 =$  \_\_\_\_\_
- (24) The reciprocal of 1.7 is \_\_\_\_\_ (fraction)
- (25)  $12.5 \times 76 =$  \_\_\_\_\_
- (26)  $2017 \div 25 =$  \_\_\_\_\_ (mixed number)
- (27)  $15518 \div 9$  has a remainder of \_\_\_\_\_
- (28)  $95 \times 89 =$  \_\_\_\_\_
- (29)  $14 \times 5\frac{1}{14} =$  \_\_\_\_\_
- \*(30)  $142857 \times 61 =$  \_\_\_\_\_
- (31)  $104 \times 112 =$  \_\_\_\_\_
- (32) The mean of 46, 47, 40, 51, and 41 is \_\_\_\_\_
- (33) 109 nickels = \$ \_\_\_\_\_
- (34) The measure of an angle complementary to a  $14^\circ$  angle is \_\_\_\_\_  $^\circ$
- (35)  $7\frac{1}{8} \times 7\frac{7}{8} =$  \_\_\_\_\_ (mixed number)
- (36)  $-13^2 =$  \_\_\_\_\_
- (37)  $6\frac{2}{3} \times 72 =$  \_\_\_\_\_
- (38) The LCM of 8, 12, and 30 is \_\_\_\_\_
- (39) 20% of 180 is \_\_\_\_\_
- \*(40) 32% of 75% of 499 is \_\_\_\_\_
- (41) The number of diagonals that can be drawn from one vertex of a dodecagon is \_\_\_\_\_
- (42) 160 acres = \_\_\_\_\_ sq. miles
- (43) The median of a trapezoid with bases 14 and 40 is \_\_\_\_\_
- (44)  $1 + 2 + 3 + \dots + 15 + 16 =$  \_\_\_\_\_
- (45) The multiplicative inverse of 4.2 is \_\_\_\_\_ (fraction)
- (46)  $26^2 - 14^2 =$  \_\_\_\_\_

- (47)  $109 \times 109 =$  \_\_\_\_\_
- (48) How many diagonals can be drawn from a single vertex of a heptagon? \_\_\_\_\_
- (49)  $\frac{9}{13} + \frac{13}{9} =$  \_\_\_\_\_ (mixed number)
- \*(50)  $\sqrt{53000} =$  \_\_\_\_\_
- (51) If  $\sqrt{45}$  simplifies as  $a\sqrt{b}$ , then  $a =$  \_\_\_\_\_
- (52)  $\sqrt{1\frac{9}{16}} =$  \_\_\_\_\_ (mixed number)
- (53)  $\frac{5}{8} + \frac{8}{5} =$  \_\_\_\_\_ (mixed number)
- (54) The slope of the line  $5x - y = 15$  is \_\_\_\_\_
- (55)  $72^2 =$  \_\_\_\_\_
- (56) The smallest of three consecutive integers whose sum is 45 is \_\_\_\_\_
- (57) The area of a rhombus with diagonals 13 ft. and 16 ft. is \_\_\_\_\_ sq. ft.
- (58) The slope of the line passing through  $(2, -5)$  and  $(-1, 1)$  is \_\_\_\_\_
- (59)  $\frac{4}{9} + \frac{9}{4} =$  \_\_\_\_\_ (mixed number)
- \*(60)  $4.4^5 =$  \_\_\_\_\_
- (61)  $\frac{9!}{7!} + \frac{7!}{9!} =$  \_\_\_\_\_ (mixed number)
- (62)  $8! \div 6! =$  \_\_\_\_\_
- (63) How many ways can a committee of 2 people be chosen from 11 people? \_\_\_\_\_
- (64) The slope of the line  $5x + 2y = 19$  is \_\_\_\_\_
- (65) The ordinate of the  $y$ -intercept of the line  $6x + 2y = 18$  is \_\_\_\_\_
- (66) The ordinate of the  $y$ -intercept of the line  $.5x - 2y = -8$  is \_\_\_\_\_
- (67)  $84^2 + 32^2 =$  \_\_\_\_\_
- (68) If  $f(x) = x^2 - 6x + 9$ , then  $f(6) =$  \_\_\_\_\_
- (69) The next term in the sequence  $0, 1, 4, 9, \dots$  is \_\_\_\_\_
- \*(70)  $\sqrt[3]{73000} =$  \_\_\_\_\_
- (71) If  $P$  and  $Q$  are roots of  $2x^2 + bx + 10 = 0$ , and  $P + Q = 5$ , then  $b =$  \_\_\_\_\_
- (72)  $\sqrt{9^3} =$  \_\_\_\_\_
- (73)  $52^2 + 15^2 =$  \_\_\_\_\_
- (74) The surface area of a cube with inner diagonal  $-\sqrt{19}$  meters is \_\_\_\_\_ sq. meters
- (75)  $i^{38} =$  \_\_\_\_\_
- (76) The positive, geometric mean between 32 and 2 is \_\_\_\_\_
- (77)  $\sqrt{36^3} =$  \_\_\_\_\_
- (78) 33 cu. inches = \_\_\_\_\_ gallons
- (79)  $1 \times 3 \times 5 \times 7 \times 0 \times 11 =$  \_\_\_\_\_
- \*(80)  $\sqrt{98} \times \sqrt{397} =$  \_\_\_\_\_