

## Middle School Number Sense Exam 036, 2/16/2018

- (1)  $108 \div 18 =$  \_\_\_\_\_
- (2)  $\frac{5}{3} \times 12 \times 20 =$  \_\_\_\_\_
- (3)  $4\frac{9}{50} =$  \_\_\_\_\_ %
- (4)  $11^2 =$  \_\_\_\_\_
- (5)  $657 - 493 =$  \_\_\_\_\_
- (6)  $\frac{17}{15} \times 60 =$  \_\_\_\_\_
- (7)  $614 - 386 =$  \_\_\_\_\_
- (8)  $11 \times 23\frac{1}{2} =$  \_\_\_\_\_
- (9)  $13 \div \frac{1}{4} =$  \_\_\_\_\_
- \*(10)  $7777 \div 42 =$  \_\_\_\_\_
- (11)  $5 \times 4 \times 3 \times 2 \times 1 \times 0 =$  \_\_\_\_\_
- (12) The number halfway between 13 and  $-6$  is \_\_\_\_\_
- (13)  $\frac{2}{3} - \frac{1}{4} =$  \_\_\_\_\_
- (14) DL + CV = \_\_\_\_\_ (Arabic Number)
- (15)  $.1\bar{8} =$  \_\_\_\_\_ (fraction)
- (16)  $(LX)^2 =$  \_\_\_\_\_ (Arabic Number)
- (17)  $75^2 =$  \_\_\_\_\_
- (18) 659 = \_\_\_\_\_ (Roman Numeral)
- (19) .03 kilograms - 20 grams = \_\_\_\_\_ grams
- \*(20)  $88 \times 631 =$  \_\_\_\_\_
- (21) 9 gallons = \_\_\_\_\_ quarts
- (22)  $11\frac{2}{3}\% =$  \_\_\_\_\_ (fraction)
- (23) The sum of the smallest 10 positive even integers is \_\_\_\_\_
- (24)  $2\frac{4}{7} \times 12\frac{4}{7} =$  \_\_\_\_\_
- (25)  $48 \div \frac{8}{9} =$  \_\_\_\_\_
- (26)  $21 + 7 \div 3 + 5 \div 3 =$  \_\_\_\_\_
- (27) The LCM of 20 and 30 is \_\_\_\_\_
- (28)  $0.454545\dots =$  \_\_\_\_\_ (fraction)
- (29)  $92 \times 95 =$  \_\_\_\_\_
- \*(30)  $11 \times 1016 \times 3\frac{4}{11} =$  \_\_\_\_\_
- (31) If  $4x + 8 = 2x + 46$ , then  $x =$  \_\_\_\_\_
- (32) The sale price of a \$48 shirt at 20% off is \$ \_\_\_\_\_
- (33) If the range of 3, 5, 7, and  $x$  is 12, then the largest possible value of  $x$  is \_\_\_\_\_
- (34) 24% of 80 is 3% of \_\_\_\_\_
- (35) The range of  $-1, 0, -6, 4, 0, -2$ , and 13 is \_\_\_\_\_
- (36)  $16^2 =$  \_\_\_\_\_
- (37) The additive inverse of  $-\frac{1}{3}$  is \_\_\_\_\_
- (38)  $102 \times 113 =$  \_\_\_\_\_
- (39)  $9\frac{1}{9} \times 9\frac{8}{9} =$  \_\_\_\_\_ (mixed number)
- \*(40) 13% of 51142 = \_\_\_\_\_
- (41) 7% of 60 is \_\_\_\_\_ % of 10
- (42) How many distinct diagonals can be drawn inside a regular polygon with exterior angle  $60^\circ$ ? \_\_\_\_\_
- (43)  $44_{10} =$  \_\_\_\_\_  $_5$
- (44) 3 sq. ft. = \_\_\_\_\_ sq. in.
- (45) If  $f(x) = \frac{5}{x} + 2$ , then  $f\left(\frac{1}{4}\right) =$  \_\_\_\_\_
- (46) The simple interest on \$4000 for 9 months at 9% is \$ \_\_\_\_\_

- (47) The length of a rectangle with area 78 sq. in. and width 6 in. is \_\_\_\_\_ inches
- (48)  $145_6 =$  \_\_\_\_\_  $_{10}$
- (49)  $\frac{7}{40} =$  \_\_\_\_\_ (decimal)
- \*(50)  $\pi^6 - \pi^5 =$  \_\_\_\_\_
- (51) The abscissa of the  $x$ -intercept of the line  $9y - 2x = 4$  is \_\_\_\_\_
- (52)  $26_8 =$  \_\_\_\_\_  $_{10}$
- (53) The next term of the sequence 0, 1, 8, 27, ... is \_\_\_\_\_
- (54)  $12.5 \times 24 =$  \_\_\_\_\_
- (55) The area of a square with a diagonal 8 in. is \_\_\_\_\_ sq. in.
- (56)  $99 =$  \_\_\_\_\_ (Roman Numeral)
- (57)  $\frac{7}{11} + \frac{11}{7} =$  \_\_\_\_\_ (mixed number)
- (58) The positive geometric mean of 16 and 25 is \_\_\_\_\_
- (59)  $1111^2 =$  \_\_\_\_\_
- \*(60) 30% of 80% of 14753 = \_\_\_\_\_
- (61) The prime twin of 19 is \_\_\_\_\_
- (62) If  $45_b = 37_{10}$ , then  $b =$  \_\_\_\_\_
- (63)  $\sqrt{3\frac{6}{25}} =$  \_\_\_\_\_ (mixed number)
- (64) If  $f(x) = 3x^2 - 2x$ , then  $f(5) =$  \_\_\_\_\_
- (65) If  $f(x) = \frac{3}{x} + 4$ , then  $f\left(-\frac{1}{4}\right) =$  \_\_\_\_\_
- (66) The ordinate of the point  $(-2, -5)$  after it is reflected over the  $x$ -axis is \_\_\_\_\_
- (67) The slope of the line  $6x = 2y + 18$  is \_\_\_\_\_
- (68)  $14 \times \frac{14}{13} =$  \_\_\_\_\_ (mixed number)
- (69)  $1008 \times 1015 =$  \_\_\_\_\_
- \*(70)  $\sqrt[3]{50000} =$  \_\_\_\_\_
- (71) A tetrahedron has \_\_\_\_\_ faces
- (72) The product of the GCF and the LCM of 12 and 9 is \_\_\_\_\_
- (73)  $43_7 + 52_7 =$  \_\_\_\_\_  $_7$
- (74) If  $P$  and  $Q$  are roots of  $2x^2 + bx + 10 = 0$ , and  $P + Q = 5$ , then  $b =$  \_\_\_\_\_
- (75)  $107 \times 105 =$  \_\_\_\_\_
- (76) The slope of the line  $x + 10 = 5y$  is \_\_\_\_\_
- (77)  $12_4 + 3_4 + 2_4 =$  \_\_\_\_\_  $_4$
- (78) If  $8^x = 12$  and  $5^x = 7$ , then  $40^x =$  \_\_\_\_\_
- (79) The sum of the roots of  $x^2 + 5x - 14 = 0$  is \_\_\_\_\_
- \*(80)  $4.65^4 =$  \_\_\_\_\_