

# Middle School Number Sense Exam 026, 11/11/2017

- (1)  $0.104 =$  \_\_\_\_\_ (fraction)
- (2)  $1\frac{1}{4} + 3 + 2.75 =$  \_\_\_\_\_
- (3)  $125 \times 0.08 =$  \_\_\_\_\_
- (4)  $108 \div 18 =$  \_\_\_\_\_
- (5)  $4997 - 3998 =$  \_\_\_\_\_
- (6)  $1988 + 98 + 988 =$  \_\_\_\_\_
- (7)  $35724 \div 4$  has a remainder of \_\_\_\_\_
- (8)  $14 \times 9 =$  \_\_\_\_\_
- (9)  $.82 =$  \_\_\_\_\_ (fraction)
- \*(10)  $82416 + 32914 + 864 =$  \_\_\_\_\_
- (11)  $111 \times 513 =$  \_\_\_\_\_
- (12)  $16.5 + 8.8 - 1.3 =$  \_\_\_\_\_
- (13)  $LXII - 15 =$  \_\_\_\_\_ (Arabic Number)
- (14)  $\frac{11}{125} =$  \_\_\_\_\_ (decimal)
- (15)  $33 \times 22 + 17 \times 22 =$  \_\_\_\_\_
- (16)  $9 \text{ feet} + 5 \text{ inches} =$  \_\_\_\_\_ inches
- (17)  $76 \times 74 =$  \_\_\_\_\_
- (18)  $4 \text{ pounds} + 7 \text{ ounces} =$  \_\_\_\_\_ ounces
- (19)  $23 \times 25 =$  \_\_\_\_\_
- \*(20)  $46\%$  of  $763 =$  \_\_\_\_\_
- (21)  $.12$  centiliters = \_\_\_\_\_ liters
- (22) The sum of the smallest 10 positive even integers is \_\_\_\_\_
- (23)  $110 \text{ feet} =$  \_\_\_\_\_ inches
- (24)  $108 \times 106 =$  \_\_\_\_\_
- (25)  $5\frac{7}{11}\% =$  \_\_\_\_\_ (fraction)
- (26)  $11 - 23 \div 9 - 22 \div 9 =$  \_\_\_\_\_
- (27) The reciprocal of  $1.7$  is \_\_\_\_\_ (fraction)
- (28)  $12 + 41 \div 7 + 22 \div 7 =$  \_\_\_\_\_
- (29)  $22222 \div 9$  has a remainder of \_\_\_\_\_
- \*(30)  $124 \times 381 =$  \_\_\_\_\_
- (31) If  $\frac{1}{9} - \frac{1}{11} = \frac{1}{x}$ , then  $x =$  \_\_\_\_\_
- (32)  $\overline{.48} =$  \_\_\_\_\_ (fraction)
- (33) The measure of an angle complementary to a  $14^\circ$  angle is \_\_\_\_\_  $^\circ$
- (34) The additive inverse of  $-\frac{1}{8}$  is \_\_\_\_\_
- (35)  $\frac{10}{7} + \frac{7}{10} =$  \_\_\_\_\_ (mixed number)
- (36)  $11\frac{3}{5} \times 11\frac{2}{5} =$  \_\_\_\_\_ (mixed number)
- (37) If the circumference of a circle with radius  $6.5 \text{ ft.}$  is  $a\pi \text{ ft.}$ , then  $a =$  \_\_\_\_\_
- (38)  $-12^2 =$  \_\_\_\_\_
- (39)  $113 \times 103 =$  \_\_\_\_\_
- \*(40)  $2 \times \pi^5 =$  \_\_\_\_\_
- (41) The product of  $\frac{9}{7}$  and its additive inverse is \_\_\_\_\_
- (42) If  $f(x) = \frac{34}{x}$ , then  $f\left(\frac{1}{11}\right) =$  \_\_\_\_\_
- (43) The median of  $1, 1, 2, 3, 5, 8, 13, 21$  is \_\_\_\_\_
- (44)  $27 \times 6 =$  \_\_\_\_\_
- (45) A regular decagon has an interior angle of measure \_\_\_\_\_  $^\circ$
- (46)  $923 \times 101 =$  \_\_\_\_\_

- (47)  $26_{10} =$  \_\_\_\_\_  $_8$
- (48) A tetrahedron has \_\_\_\_\_ edges
- (49) If  $f(x) = .25x + x$ , then  $f(8) =$  \_\_\_\_\_
- \*(50)  $672 \div 8.5 \times 17 =$  \_\_\_\_\_
- (51) If  $f(x) = (x + 9)(x - 9)$ , then  $f(-3) =$  \_\_\_\_\_
- (52) The area of an equilateral triangle with side 20 is  $k\sqrt{3}$ ,  $k =$  \_\_\_\_\_
- (53) 21 cu. in. = \_\_\_\_\_ gallons
- (54)  $-15^2 =$  \_\_\_\_\_
- (55)  $425_7 - 256_7 =$  \_\_\_\_\_  $_7$
- (56) The number of unique diagonals that can be drawn in a 16-gon is \_\_\_\_\_
- (57)  $\frac{21}{19} \times 21 =$  \_\_\_\_\_ (mixed number)
- (58) The product of the LCM and the GCF of 7 and 16 is \_\_\_\_\_
- (59) In the arithmetic series  $\dots, w, x, 3, y, z, \dots$ , then  $w + x + y + z =$  \_\_\_\_\_
- \*(60) The number of hours in the year 2003 is \_\_\_\_\_
- (61)  $3367 \times 51 =$  \_\_\_\_\_
- (62)  $.27_7 =$  \_\_\_\_\_  $_{10}$
- (63)  $111^2 =$  \_\_\_\_\_
- (64) The ordinate of the point  $(0, -6)$  after it is reflected over the  $x$ -axis is \_\_\_\_\_
- (65)  $3367 \times 27 =$  \_\_\_\_\_
- (66) 462 cu. in. = \_\_\_\_\_ gallons
- (67)  $114_6 =$  \_\_\_\_\_  $_{10}$
- (68)  $a^3b^2c^3 \times abc^2 =$  \_\_\_\_\_
- (69)  $143 \times 63 =$  \_\_\_\_\_
- \*(70)  $\pi^6 =$  \_\_\_\_\_
- (71)  $\sin(30^\circ) =$  \_\_\_\_\_
- (72) 22.5 miles per hour = \_\_\_\_\_ feet per second
- (73) The sum of the roots of  $(4x^2 - 3x + 5)(8x^2 + 5x - 11) = 0$  is \_\_\_\_\_
- (74) The distance between the roots of  $|x + 3| = 5$  is \_\_\_\_\_
- (75)  $5! =$  \_\_\_\_\_
- (76)  $.24_6 =$  \_\_\_\_\_  $_{10}$
- (77) The smallest angle formed by the hands of a clock at 6:10 am is \_\_\_\_\_  $^\circ$
- (78) If  $9^x = 576$ , then  $3^x =$  \_\_\_\_\_
- (79) How many distinct 6-letter arrangements can be made from  $\{r, o, b, e, r, t\}$ ? \_\_\_\_\_
- \*(80) 56% of 9138 = \_\_\_\_\_