

## Middle School Number Sense Exam 002, 5/26/2017

- (1)  $153 \div 9 =$  \_\_\_\_\_
- (2)  $\frac{17}{25} =$  \_\_\_\_\_ %
- (3)  $6\frac{1}{4} =$  \_\_\_\_\_ %
- (4)  $12 \div .2 =$  \_\_\_\_\_
- (5)  $14^2 =$  \_\_\_\_\_
- (6)  $294 + 387 =$  \_\_\_\_\_
- (7)  $67 \times 7 =$  \_\_\_\_\_
- (8)  $6\frac{3}{5} =$  \_\_\_\_\_ %
- (9)  $(7 \times 100) + (6 \times 10) + (3 \times 10^2) =$  \_\_\_\_\_
- \*(10)  $489 \times 189 =$  \_\_\_\_\_
- (11)  $101 \times 51 =$  \_\_\_\_\_
- (12)  $36 - 11 \times 2 + 5 =$  \_\_\_\_\_
- (13)  $101 \times 73 =$  \_\_\_\_\_
- (14)  $7.4 + 5.3 - 3.7 =$  \_\_\_\_\_
- (15) 3 gallon + 5 quarts = \_\_\_\_\_ quarts
- (16) 2009 = \_\_\_\_\_ (Roman Numeral)
- (17) The mode of 1, 11, 11, 1, 1, 11, and 11 is \_\_\_\_\_
- (18)  $76 \times 36 =$  \_\_\_\_\_
- (19)  $5\frac{4}{5} =$  \_\_\_\_\_ %
- \*(20) 38% of 1776 is \_\_\_\_\_
- (21)  $0.003 \times 10^2 =$  \_\_\_\_\_
- (22) The perimeter of a square with side  $\frac{5}{24}$  foot  
is \_\_\_\_\_ inches
- (23) The area of a rhombus with diagonals 22 ft. and  
18 ft. is \_\_\_\_\_ sq. ft.
- (24)  $75 \times 8 =$  \_\_\_\_\_
- (25) The mean of 69, 64, 62, and 61 is \_\_\_\_\_
- (26)  $14 \times 8 \times 25 =$  \_\_\_\_\_
- (27)  $3\frac{3}{5}\% =$  \_\_\_\_\_ (fraction)
- (28) 17 pints = \_\_\_\_\_ quarts
- (29)  $4\frac{4}{9}\% =$  \_\_\_\_\_ (fraction)
- \*(30)  $273 + 264 + 248 - 198 + 253 =$  \_\_\_\_\_
- (31) The sum of the prime factors of 52 is \_\_\_\_\_
- (32) The cost of renting a wheelbarrow for 6 days at  
\$8.50 per day is \$ \_\_\_\_\_
- (33) 68% = \_\_\_\_\_ (fraction)
- (34) 9.5 quarts = \_\_\_\_\_ gallons
- (35)  $11\frac{2}{7} \times 11\frac{5}{7} =$  \_\_\_\_\_ (mixed number)
- (36) The product of the LCM and the GCF of 8 and  
22 is \_\_\_\_\_
- (37) The largest prime number less than 29 is \_\_\_\_\_
- (38)  $8\frac{1}{3}\% =$  \_\_\_\_\_ (fraction)
- (39) If  $f(x) = 2x^2 - 11x + 7$ , then  $f(5) =$  \_\_\_\_\_
- \*(40) 82% of 4912 = \_\_\_\_\_
- (41)  $41_{10} =$  \_\_\_\_\_ <sub>7</sub>
- (42)  $106 \times 107 =$  \_\_\_\_\_
- (43) 77 cu. in. = \_\_\_\_\_ gallons
- (44)  $\sqrt{1\frac{11}{25}} =$  \_\_\_\_\_ (mixed number)

- (45) The radius of a circle with circumference  $18\pi$  cm is \_\_\_\_\_ cm
- (46) If  $\frac{1}{25} + \frac{1}{4} = \frac{1}{x}$ , then  $x =$  \_\_\_\_\_
- (47)  $42 + 18 \div 7 + 17 \div 7 =$  \_\_\_\_\_
- (48)  $103_6 =$  \_\_\_\_\_  $_{10}$
- (49)  $11\frac{4}{5} \times 11\frac{1}{5} =$  \_\_\_\_\_
- \*(50)  $142857 \times 31 =$  \_\_\_\_\_
- (51) The simple interest on \$2400 at 3% interest for 8 months is \$ \_\_\_\_\_
- (52) If  $\sqrt{x-4} = 7$ , then  $x =$  \_\_\_\_\_
- (53) 5% of 36 is 45% of \_\_\_\_\_
- (54) The diagonal of a square with side 12 cm. is \_\_\_\_\_ sq. cm.
- (55) 3 cubic yards = \_\_\_\_\_ cubic feet
- (56) 1.6 hours = \_\_\_\_\_ minutes
- (57)  $15 \text{ ft.} \times 6 \text{ ft.} \times 7 \text{ ft.} =$  \_\_\_\_\_ cubic yards
- (58)  $43_8 - 15_8 =$  \_\_\_\_\_  $_8$
- (59)  $41^\circ$  Fahrenheit = \_\_\_\_\_  $^\circ$  Celcius
- \*(60)  $142857 \times 65 =$  \_\_\_\_\_
- (61)  $5^3 \times 2^5 =$  \_\_\_\_\_
- (62)  $5^4 \times 2^6 =$  \_\_\_\_\_
- (63)  $.242424\dots =$  \_\_\_\_\_ (fraction)
- (64) The probability of flipping 3 coins and getting all heads is \_\_\_\_\_
- (65)  $\bar{.5} + \bar{.4} + \bar{.2} =$  \_\_\_\_\_ (mixed number)
- (66) The slope of the line  $12x - 6y = 12$  is \_\_\_\_\_
- (67)  $(a^2b^2)(abc) \div (a^2c) =$  \_\_\_\_\_
- (68)  $1011_2 =$  \_\_\_\_\_  $_{10}$
- (69) If the short leg of a 30-60-90 triangle is 5 miles, then the hypotenuse is \_\_\_\_\_ miles
- \*(70)  $\sqrt[3]{227000} =$  \_\_\_\_\_
- (71) If  $(2n-1)(n+3) = 2n^2 + an - 3$ , then  $a =$  \_\_\_\_\_
- (72) How many distinct four letter arrangements can be made from  $\{p, a, p, a\}$ ? \_\_\_\_\_
- (73) If  $(x-9)(x+4) = x^2 + bx - 36$ , then  $b =$  \_\_\_\_\_
- (74)  $\frac{17}{14} \times 17 =$  \_\_\_\_\_ (mixed number)
- (75)  $43_5 + 23_5 =$  \_\_\_\_\_  $_5$
- (76)  $1004 \times 1003 =$  \_\_\_\_\_
- (77) If  $\frac{1}{8} + \frac{1}{6} = \frac{1}{x}$ , then  $x =$  \_\_\_\_\_
- (78)  $2^4 \times 5^5 =$  \_\_\_\_\_
- (79)  $49 \times 51 =$  \_\_\_\_\_
- \*(80)  $3^{10} =$  \_\_\_\_\_