

Middle School Number Sense Exam

024, 10/28/2017

- (1) $.08 \times .035 =$ _____ (decimal)
- (2) $342 - 186 =$ _____
- (3) $713 - 586 =$ _____
- (4) $\frac{19}{50} =$ _____ (decimal)
- (5) $16 \times (5^2 - 3^2) =$ _____
- (6) $5.22 + 2.17 + 4.11 =$ _____ (decimal)
- (7) $3214 \times .11 =$ _____ (decimal)
- (8) $98 + 96 + 97 =$ _____
- (9) $\frac{8}{9} \times 999 =$ _____
- *(10) $7261 - 86 - 491 - 3245 =$ _____
- (11) MCLXVII = _____ (Arabic Number)
- (12) 0.12 meters = _____ millimeters
- (13) $17^2 =$ _____
- (14) $1 + 3 + 5 + 2 + 4 + 6 =$ _____
- (15) Which is larger: $\frac{5}{9}$ or $\frac{6}{11}$? _____
- (16) Which larger: $\frac{8}{23}$ or .3? _____
- (17) $7 \times 3994 =$ _____
- (18) $\frac{9}{12} + \frac{6}{8} + \frac{9}{18} =$ _____
- (19) The mean of 11, 15, and _____ is 16
- *(20) $198 \times 321 =$ _____
- (21) $68 - XXIV =$ _____ (Roman Numeral)
- (22) If 10 pens cost \$5.90, then 4 pens cost \$ _____
- (23) $11\frac{5}{7}\% =$ _____ (fraction)
- (24) The multiplicative inverse of 2.75 is _____ (fraction)
- (25) $108 \times 112 =$ _____
- (26) $27 \times 23 =$ _____
- (27) $104 \times 103 =$ _____
- (28) $46 \div 2.3 =$ _____
- (29) $12.5 \times 400 =$ _____
- *(30) $3275 \div 13 =$ _____
- (31) If $a = 3, b = -3,$ and $c = 3,$ then $-ab^2 - c =$ _____
- (32) $52 \times 17 + 52 \times 8 =$ _____
- (33) $34_5 =$ _____ ₁₀
- (34) 80% of 15000 is _____
- (35) $24 \div \frac{8}{11} =$ _____
- (36) If $2x - 3 = -5 + x,$ then $x =$ _____
- (37) If $f(x) = x^2 - 8x + 16,$ then $f(14) =$ _____
- (38) $66\frac{2}{3} \times 240 =$ _____
- (39) $(86 - 68) \div 9$ has a remainder of _____
- *(40) $2\frac{7}{9} \times 682 \times 9 =$ _____
- (41) $11\frac{4}{5} \times 11\frac{1}{5} =$ _____
- (42) How many subsets does the set $\{t, m, s, c, a, 2, 0, 1, 6\}$ have? _____
- (43) 80 acres = _____ sq. miles
- (44) The sale price of a \$120 car battery at 30% off is \$ _____

- (45) $7\frac{1}{3} \times 2\frac{1}{3} =$ _____ (mixed number)
- (46) The number of diagonals that can be drawn from one vertex of a dodecagon is _____
- (47) $2 + 4 + 6 + \dots + 26 =$ _____
- (48) $-50^2 =$ _____
- (49) $32_6 =$ _____ ₁₀
- *(50) The volume of a rectangular solid of edges 34, 36, and 50 is _____
- (51) $1111^2 =$ _____
- (52) $42 \times 53 =$ _____
- (53) The product of the LCM and the GCF of 22 and 9 is _____
- (54) $\frac{7}{12} + \frac{12}{7} =$ _____ (mixed number)
- (55) The slope of the line passing through (9, 2) and (0, -1) is _____
- (56) The area of a triangle with sides of 5, 12, and 13 is _____
- (57) The 13th triangular number is _____
- (58) $\sqrt{4\frac{21}{25}} =$ _____ (mixed number)
- (59) $7^2 + 14^2 =$ _____
- *(60) $\sqrt{140000} =$ _____
- (61) $34 \times 55 =$ _____
- (62) If $-\sqrt{125}$ simplifies as $a\sqrt{b}$, then $a =$ _____
- (63) $908^2 =$ _____
- (64) What is the probability of choosing a triangular number from the first 10 counting numbers? _____
- (65) $42 \times 143 =$ _____
- (66) $28 \times 77 =$ _____
- (67) $(32_7)^2 - (30_7)^2 =$ _____ ₇
- (68) $333 \times 111 =$ _____
- (69) $\sqrt{1\frac{32}{49}} =$ _____ (mixed number)
- *(70) The volume of a cube with edge 27 is _____
- (71) If $x - y = 12$ and $x + y = 18$, then $x^2 - y^2 =$ _____
- (72) The height of an isosceles trapezoid with bases of 16 and 26 and equal sides of $5\sqrt{2}$ is _____
- (73) $15^0 + \sqrt{16} =$ _____
- (74) If P and Q are roots to $9x^2 + x + 10 = 0$, then $P + Q + PQ =$ _____
- (75) The sum of the roots of $x^2 + 5x - 14 = 0$ is _____
- (76) If P and Q are roots of $2x^2 + bx + 10 = 0$, and $P + Q = 5$, then $b =$ _____
- (77) $837 \times 101 =$ _____
- (78) $111 \times 163 =$ _____
- (79) $i^{10} =$ _____
- *(80) $5.3^3 =$ _____