

Middle School Number Sense Exam 040, 3/26/2018

- (1) $492 + 399 =$ _____
- (2) $75075 \div 15 =$ _____
- (3) $989 + 989 + 989 + 989 =$ _____
- (4) $21 \div .25 =$ _____
- (5) $1 + 1 =$ _____
- (6) $404 \times 21 =$ _____
- (7) $\frac{5}{7} \times 56 =$ _____
- (8) $0.7 =$ _____ %
- (9) $0.321 =$ _____ % (decimal)
- *(10) $1325 + 2428 - 1743 =$ _____
- (11) $48 \times 52 =$ _____
- (12) $22 + 3(18 \div 6) =$ _____
- (13) $78 \times 72 =$ _____
- (14) $12.5 \times 72 =$ _____
- (15) $25^2 =$ _____
- (16) $\frac{4}{7} + \frac{9}{14} =$ _____ (mixed number)
- (17) $38 \times 78 =$ _____
- (18) $14^2 =$ _____
- (19) $18^2 =$ _____
- *(20) $497 \times 686 =$ _____
- (21) $1.4^2 =$ _____
- (22) $2 + 4 + 6 + \dots + 18 + 20 =$ _____
- (23) The mean of the smallest 4 prime numbers is _____
- (24) The remainder of $1463 \div 4$ is _____
- (25) $24 \times 12.5 =$ _____
- (26) $12 \times 87 =$ _____
- (27) $(20 + 1)(20 - 1) =$ _____
- (28) $111 \times 56 =$ _____
- (29) The number halfway between -3 and 19 is _____
- *(30) $\sqrt{291537} =$ _____
- (31) If $4x - 7 = 29$, then $x =$ _____
- (32) The area of a rhombus with diagonals 13 cm and 20 cm is _____ sq. cm.
- (33) If x is positive and $x^2 = 36$, then $x^3 =$ _____
- (34) $29 \times 89 =$ _____
- (35) $113 \times 106 =$ _____
- (36) $93 \times 91 =$ _____
- (37) $8\frac{7}{11} \times 8\frac{4}{11} =$ _____ (mixed number)
- (38) If half a dozen brownies cost $\$1.02$, then one brownie cost _____ (cents)
- (39) 0.015 Dekameters = _____ centimeters
- *(40) $\sqrt{3421000} =$ _____
- (41) $2^4 \times 5^5 =$ _____
- (42) $27 \times 87 =$ _____
- (43) $\frac{1}{21}$ gallon = _____ cu. in.
- (44) The simple interest on $\$800$ at 6% for 4 months is \$ _____
- (45) $(39 \times 15) \div 6$ has a remainder of _____
- (46) $1 + 2 + 3 + 4 + \dots + 24 =$ _____

- (47) The length of a rectangle with area 78 sq. in. and width 6 in. is _____ inches
- (48) $4! =$ _____
- (49) What % of 24 is 36? _____
- *(50) $14 \times 16 \times 18 =$ _____
- (51) $53_{10} =$ _____ $_7$
- (52) 35° Celsius = _____ $^\circ$ Fahrenheit
- (53) If $3! + 4! = k(3!)$, then $k =$ _____
- (54) The slope of a line with x -intercept of $(5, 0)$ and a y -intercept of $(0, -2)$ is _____
- (55) $21 \times \frac{21}{19} =$ _____ (mixed number)
- (56) $1 + 4 + 7 + \dots + 34 =$ _____
- (57) $39_{10} =$ _____ $_6$
- (58) The 15th triangular number is _____
- (59) The number of unique diagonals that can be drawn from one vertex of a heptagon is _____
- *(60) $315 \times 1428 =$ _____
- (61) The product of the LCM and the GCF of 8 and 18 is _____
- (62) $44_7 - 36_7 =$ _____ $_7$
- (63) $47^2 + 66^2 =$ _____
- (64) If $\frac{a}{b} + \frac{b}{a} = 2\frac{25}{176}$, where a and b are relatively prime, then the sum of a and b is _____
- (65) $75_9 - 68_9 =$ _____ $_9$
- (66) If $45_b = 37_{10}$, then $b =$ _____
- (67) The 13th triangular number is _____
- (68) $3367 \times 33 =$ _____
- (69) If $22_b = 14_{10}$, then $b =$ _____
- *(70) $1.84^8 =$ _____
- (71) If $\log_x 10000 = 4$, then $x =$ _____
- (72) $\sqrt{16^{-1}} =$ _____
- (73) 42 has _____ unique prime factors
- (74) $\frac{1}{12} + \frac{1}{20} + \frac{1}{30} =$ _____
- (75) 40 acres = _____ sq. miles
- (76) $13_6 + 24_6 =$ _____ $_6$
- (77) $5\frac{1}{3} \times 6\frac{1}{5} =$ _____ (mixed number)
- (78) $7\frac{2}{3} - 4\frac{7}{9} =$ _____ (mixed number)
- (79) If $\log_{20} 8000 = x$, then $x =$ _____
- *(80) The surface area of a sphere with radius 13 in. is _____ sq. in.