Middle School Number Sense Exam 020, 9/26/17

(1) $11 \times 7.639 =$ _____ (decimal)

(2) $78\% =$ _____ (decimal)

(3) $\dfrac{76}{3} =$ _____ (mixed number)

(4) $513 + 768 =$ _____

(5) $48048 \div 3 =$ _____

(6) $36 + 4(3 + 7) =$ _____

(7) $0.44 =$ _____ (fraction)

(8) $138 \div 23 =$ _____

(9) $361 \times 11 =$ _____

*(10) $7462 + 891 + 16121 + 82 =$ _____

(11) Which is larger: $-\dfrac{3}{11}, -\dfrac{5}{18}$? _____

(12) 18 meters = _____ Hectometers

(13) $88 \times 12\dfrac{1}{2} =$ _____

(14) $44 \times 52 - 44 \times 32 =$ _____

(15) $36 \times 33\dfrac{1}{3} =$ _____

(16) DLXII = _____ (Arabic Numeral)

(17) $12.5 \times .24 =$ _____

(18) $31 + 9(24 \div 6) =$ _____

(19) $12 \times 707 =$ _____

*(20) $\dfrac{3}{7} \times 37761 =$ _____

(21) If 8 bags of chips cost \$17.92, then 1 bag of chips costs \$ _____

(22) The mode of $77, 7, 71, 17, 11, 77,$ and 777 is _____

(23) The cost of driving 175 miles at \$0.30 per mile is \$ _____

(24) The mode of $29, 9, 92, 19, 99, 93,$ and 19 is _____

(25) The GCD of $18, 30,$ and 40 is _____

(26) $6\dfrac{2}{3} + 7\dfrac{10}{21} =$ _____ (mixed number)

(27) $21 \div \dfrac{1}{7} =$ _____

(28) The additive inverse of -6.8 is _____

(29) $35 \div 1.25 =$ _____

*(30) 28% of 3869 is _____

(31) The complement of a $29°$ angle is _____ $°$

(32) The GCF of 16 and 56 is _____

(33) $92 \times 91 =$ _____

(34) The selling price of a \$64 item with a 100% markup is \$ _____

(35) IF $2x + 5 = 17$, then $25(2x + 5) =$ _____

(36) 20% of 180 is _____

(37) The circumference of a circle with area 196π sq. in. is _____ in.

(38) 8 is _____ % of 24

(39) $MM - CC =$ _____ (Roman Numeral)

*(40) $28^2 + 29^2 + 30^2 + 31^2 + 32^2 =$ _____

(41) $98 \times 89 =$ _____

(42) The product of the LCM and the GCF of 4 and 32 is _____

(43) The area of a square with side $3\sqrt{3}$ ft is _____ sq. ft.

(44) $231_9 =$ _____ $_{10}$

(45) If $f9x) = \dfrac{2}{x} + \dfrac{3}{x}$, then $f\left(\dfrac{1}{6}\right) =$ _____

(46) $7 \times 143 =$ _____

(47) $88 \times 95 =$ _____

(48) $37_{10} =$ _____ $_7$

(49) The sum of the interior angles of a dodecagon

is _____ $^\circ$

*(50) $\pi^6 - \pi^5 =$ _____

(51) $7\dfrac{2}{3} \times 8\dfrac{2}{3} =$ _____ (mixed number)

(52) The 40th term of the sequence

$-2, 1, 4, \ldots$ is _____

(53) The number of unique diagonals that can be drawn

in a 16-gon is _____

(54) $1022_3 =$ _____ $_{10}$

(55) $61 \times 59 =$ _____

(56) $(4^3 + 6^3 + 10^3) \div 3$ has a remainder of _____

(57) $\sqrt{2\dfrac{14}{25}} =$ _____ (mixed number)

(58) If $32_b = 20_{10}$, then $b =$ _____

(59) $3367 \times 54 =$ _____

*(60) $6.22 \times 1.6 \times 9.5 =$ _____

(61) If $(8, 3)$ is on the line $3x - 5y = C$, where C is a

constant, then the x-intercept is _____

(62) If $\sqrt{98}$ simplifies to $a\sqrt{b}$, then $a =$ _____

(63) If $7x^2 - 3 = 109$ and $x > 0$, then $x =$ _____

(64) If $3\sqrt{x} + 9 = 10$, then $x =$ _____

(65) 15 miles per hour = _____ feet per second

(66) $\sqrt{1\dfrac{7}{9}} =$ _____ (mixed number)

(67) $56 \times 625 =$ _____

(68) If it takes Julie 2 hours to do the same job that

takes Billy 5 hours to do, how long would it take

them if they work together? _____ hours

(69) $.272727\ldots =$ _____ (fraction)

*(70) $13 \times 15 \times 18 =$ _____

(71) The number of positive integral divisors less than

18 that are relatively prime to 18 is _____

(72) $997 \times 994 =$ _____

(73) The area of a right triangle with hypotenuse 25

and one leg of 24 is _____

(74) $994 \times 998 =$ _____

(75) The surface area of a sphere with radius 3 ft.

is _____ π sq. ft.

(76) The probability of getting exactly 2 heads when

flipping four fair coins is _____

(77) The product of the roots of

$6x^2 + x - 5 = 0$ is _____

(78) $18 \times 36 =$ _____

(79) The discriminate of $x^2 + 9x + 20 = 0$ is _____

*(80) 7400 inches = _____ feet