Middle School Number Sense Exam 036, 10/9/2018

(1) $45^2 =$ _____

(2) $\frac{1}{2} + \frac{1}{5} =$ _____

(3) $\frac{1}{4}$ of $23 =$ _____

(4) $2\frac{1}{4} =$ _____ %

(5) $1628 \div 4 =$ _____

(6) $2017 + 2018 =$ _____

(7) 20% of 20 is _____

(8) $497 \times 5 =$ _____

(9) $18.3 \times 11 =$ _____ (decimal)

*(10) $1317 + 249 - 781 =$ _____

(11) $33\frac{1}{3} \times 63 =$ _____

(12) $75^2 =$ _____

(13) XIX + XI = _____ (Arabic Number)

(14) $31 + 9(24 \div 6) =$ _____

(15) $39 \times 31 =$ _____

(16) $68 \times 25 =$ _____

(17) Which larger: $\frac{8}{23}$ or .3? _____

(18) 23 cm. + 14 mm. = _____ mm.

(19) $19^2 =$ _____

*(20) $254 \times 327 =$ _____

(21) $\frac{5}{7} + \frac{7}{5} =$ _____ (mixed number)

(22) $72 \times 12\frac{1}{2} =$ _____

(23) The perimeter of a regular pentagon with side length 8.6 cm is _____ cm

(24) $8\frac{1}{2} - 5\frac{5}{8} =$ _____ (mixed number)

(25) $24 \times 4.5 =$ _____

(26) $28 \times 125 =$ _____

(27) $8 \times 2 + 4 \div 2 =$ _____

(28) The GCF of 75 and 105 is _____

(29) $45 \div 1.25 =$ _____

*(30) $87 \times 93 \times 13 =$ _____

(31) $114 \times 102 =$ _____

(32) 478 meters = _____ hectometers

(33) 9 is _____ % of 54

(34) The mean of $36, 32, 32$, and 32 is _____

(35) $87 \times 96 =$ _____

(36) If the perimeter of a rhombus is 14 in. then one side measures _____ in

(37) $27 \times 87 =$ _____

(38) The discount on a $35 item on sale for 20% off is $ _____

(39) $14^2 + 42^2 =$ _____

*(40) $11 \times 13 \times 15 =$ _____

(41) $17 \times 24 - 19 \times 17 =$ _____

(42) 36 has _____ different, positive factors

(43) $56^2 \div 6$ has a remainder of _____

(44) The area of a triangle with base 3 and height 9 is _____

(45) $(78 \times 64) \div 6$ has a remainder of _____

(46) $(39^2 + 9^2) \div 4$ has a remainder of _____

(47) $-50^2 =$ _____

(48) $111^2 =$ _____

(49) $29 \times 31 =$ _____

*(50) $19 \times 21 \times 23 =$ _____

(51) The diagonal of a square with area 121 sq. cm. is _____ cm.

(52) $13 \times \frac{16}{19} =$ _____ (mixed number)

(53) $16^2 + 42^2 =$ _____

(54) $112 \times 108 =$ _____

(55) If $6x = 5y$ and $2y = 3z$, then $x =$ _____ z's

(56) 0.25 gallon = _____ ounces

(57) $18 \times \frac{18}{19} =$ _____ (mixed number)

(58) $.\overline{51} =$ _____ fraction

(59) If $f(x) = 13x - 4$, then $f(10) - f(3) =$ _____

*(60) The volume of a cube with edge 45 is _____

(61) $5^4 \times 4^3 =$ _____

(62) If $\sqrt{108}$ simplified is $a\sqrt{b}$, then $a =$ _____

(63) $999 \times 984 =$ _____

(64) The ordinate of the y-intercept of the line $16+2y = 4x$ is _____

(65) If $46_b = 42_{10}$, then $b =$ _____

(66) The slope of the line passing through $(0, 5)$ and $(2, 6)$ is _____

(67) $.272727\ldots =$ _____ (fraction)

(68) If the hypotenuse of a right triangle with integers sides is 41, then the perimeter is _____

(69) If $41_b = 21_{10}$, then $b =$ _____

*(70) $\sqrt[3]{33000} =$ _____

(71) If $\sqrt{63}$ simplifies to $a\sqrt{b}$, then $a =$ _____

(72) If $\log_5 x = 4$, then $x =$ _____

(73) $.\overline{54} =$ _____ (fraction)

(74) If $f(x) = 3x^2 - 18x + 21$ and $g(x) = f(x-4)$, then $g(x)$ has an axis of symmetry of $x =$ _____

(75) The number of unique diagonals that can be drawn from a single vertex of an undecagon is _____

(76) $\sqrt{6\frac{1}{4}} =$ _____ (mixed number)

(77) $5 + 4 \times 3 \times 2 + 1 \times 0 =$ _____

(78) If $f(x) = ax^2 + 12x + 4$ has one distinct real root, then $a =$ _____

(79) $43_5 + 24_5 =$ _____ 5

*(80) $6.22^4 =$ _____