Middle School Number Sense Exam 025, 11/4/2017

(1) $2016 \times 11 =$ _____

(2) $\frac{17}{50} =$ _____ %

(3) $\frac{17}{15} \times 60 =$ _____

(4) $\frac{9}{17} - \frac{1}{2} =$ _____

(5) $7 + 7^2 =$ _____

(6) $.67 \times 101 =$ _____

(7) $25\% =$ _____ (fraction)

(8) $11 \times 972 =$ _____

(9) $50 \times 98 =$ _____

*(10) $16 + 26 + 36 + 46 + 56 + 66 - 76 =$ _____

(11) $600\% =$ _____ (decimal)

(12) $12 + 8(13 - 9) =$ _____

(13) $28 \times 22 =$ _____

(14) 12 kiloliters − 400 liters = _____ liters

(15) $5 \times 16\frac{3}{5} =$ _____

(16) M−CCXX = _____ (Arabic Number)

(17) $95^2 =$ _____

(18) $75^2 =$ _____

(19) $\frac{3}{11} =$ _____ % (mixed number)

*(20) 28% of 18465 = _____

(21) The remainder of $3510 \div 9$ is _____

(22) The GCF of 18 and 42 is _____

(23) $(-16)(-2) - (-2) =$ _____

(24) The selling price of a \$350 item with a 40% markup is \$ _____

(25) 27% of 64 is 9% of _____

(26) $75 \times 84 =$ _____

(27) $324 \times 0.333\ldots =$ _____

(28) $\frac{2}{5}$ of 18 is _____

(29) $.\overline{39} =$ _____ (fraction)

*(30) $5.3 \times 8.5 \times 11.7 =$ _____

(31) The area of a right triangle with a base of 14 and height of 28 is _____

(32) $45_9 =$ _____ 10

(33) $12\frac{1}{2} \times 40 =$ _____

(34) If x is positive and $x^2 = 36$, then $x^3 =$ _____

(35) $7\frac{5}{6} \times 7\frac{1}{6} =$ _____ (mixed number)

(36) The number of subsets in $\{g, o, l, f, i, n\}$ is _____

(37) If $x = 3$ and $y = 4$, then $x^2 + 2xy + y^2 =$ _____

(38) $74 \times 34 =$ _____

(39) $18^2 + 54^2 =$ _____

*(40) $\sqrt{18000} =$ _____

(41) $26_{10} =$ _____ 8

(42) $41_{10} =$ _____ 7

(43) 35°Celsius = _____ °Fahrenheit

(44) 3 cu. inches = _____ gallons

(45) An octagon has how many more sides than a quadrilateral? _____

(46) $10\frac{2}{5} \times 10\frac{3}{5} =$ _____ (mixed number)

(47) An interior angle of a regular decagon has a measure of _____; °

(48) A polygon with 44 diagonals has _____ sides

(49) $\frac{39}{40} =$ _____ (decimal)

*(50) $\sqrt{8000} =$ _____

(51) $6^2 + 12^2 =$ _____

(52) $9^2 + 27^2 =$ _____

(53) $\sqrt[3]{\frac{343}{27}} =$ _____ (mixed number)

(54) $42^2 =$ _____

(55) If $f(x) = x^3 - 3x^2 + 2x + 4$, then $f(4) =$ _____

(56) What number multiplied by 7 and added to 18 gives the same result? _____

(57) $\frac{1}{33}$ gallon = _____ cu. inches

(58) Subtracting 21% of a number from the number is the same as multiplying the number by _____

(59) $(41 \times 20) \div 6$ has a remainder of _____

*(60) $\sqrt[3]{20000} =$ _____

(61) If $45° = a\pi$ radians, then $a =$ _____

(62) If the x-intercept of $3x + 4y = C$ is 2 then the y-intercept is _____

(63) The measure of an exterior angle of a regular pentagon is _____ °

(64) $9^2 + 27^2 =$ _____

(65) If $f(x) = \frac{16}{x} - 2$, then $f\left(\frac{1}{4}\right) =$ _____

(66) The sum of the positive integral divisors of 21 is _____

(67) $7^2 + 49^2 =$ _____

(68) The acute angle formed by the hands of a clock at 4:20 is _____ °

(69) The 8th pentagonal number is _____

*(70) 18 miles = _____ feet

(71) If $9^x = 55$, then $9^{x+1} =$ _____

(72) If the surface area of a sphere with radius 8 cm is $a\pi$ sq. cm., then $a =$ _____

(73) The slope of the line passing through $(1.3, -1)$ and $(3.3, 7)$ is _____

(74) The total number of unique diagonals that can be drawn in an undecagon is _____

(75) How many distinct 6-letter arrangements can be made from $\{r, o, b, e, r, t\}$? _____

(76) If $9\sqrt{x} + 4 = 85$, then $x =$ _____

(77) The number of ways to arrange five people in a line is _____

(78) $65^2 + 44^2 =$ _____

(79) $\cos(60°) =$ _____

*(80) $\sqrt{280} \times \sqrt{37} =$ _____