Middle School Number Sense Exam 041, 4/1/2018

(1) $\frac{5}{11} + \frac{2}{3} =$ _____

(2) $1993 + 998 + 2994 + 99 =$ _____

(3) $6 \times 3.5 =$ _____

(4) $8372 \div 9$ has a remainder of _____

(5) $316 \times 50 =$ _____

(6) $342 + 589 =$ _____

(7) $12 \times (3^3 - 2) + 2^2 =$ _____

(8) $43 \times 13 =$ _____

(9) $\frac{3}{8} + \frac{5}{8} - \frac{7}{8} =$ _____ (fraction)

*(10) $3 + 13 + 23 + 33 - 43 + 53 + 63 =$ _____

(11) $47 \times 101 =$ _____

(12) $533 \times 111 =$ _____

(13) $1.8 \div 0.006 =$ _____

(14) $16 \times 12 + 44 \times 12 =$ _____

(15) $15 + 18 + 21 + 24 + 27 + 30 + 33 =$ _____

(16) $22 \times 82 =$ _____

(17) $17^2 =$ _____

(18) $600\% =$ _____ (decimal)

(19) $\frac{7}{8} =$ _____ %

*(20) $8\frac{5}{9} \times 3\frac{1}{10} \times 5\frac{4}{5} =$ _____

(21) $66 \times 0.454545\ldots =$ _____

(22) $5\frac{1}{3}\% =$ _____ (fraction)

(23) 47 liters = _____ Dekaliters

(24) $\frac{6}{10} + \frac{12}{20} + \frac{9}{15} =$ _____

(25) $16\frac{2}{3} \times 48 =$ _____

(26) $8 \times 12\frac{1}{2} =$ _____

(27) 200 minutes = _____ hours

(28) The area of a triangle with base 7 in. and height 16 in. is _____ sq. in.

(29) $26 \times 86 =$ _____

*(30) $397 \times 283 =$ _____

(31) The number halfway between 146 and 392 is ____

(32) If $8n + n - 3n = 5$, then $n =$ _____

(33) 40% of 2500 is _____

(34) The number of positive integral divisors of 12 is _

(35) The selling price of a \$46 item after a 100% markup is \$ _____

(36) $2 + 4 + 6 + \ldots + 28 + 30 =$ _____

(37) $180 \div 4.5 =$ _____

(38) $19 \times 36 - 36 \times 8 =$ _____

(39) $\sqrt{676} =$ _____

*(40) $16 \times 18 \times 20 =$ _____

(41) If $\frac{1}{8} + \frac{1}{2} = \frac{1}{x}$, then $x =$ _____ (decimal)

(42) $\frac{23}{40} =$ _____ (decimal)

(43) $15 \times 17 + 15 \times 13 =$ _____

(44) How many distinct diagonals can be drawn inside a regular polygon with exterior angle 60°? _____

(45) $15_{10} =$ _____ $_4$

(46) $33_{10} =$ _____ $_4$

(47) The diagonal of a rectangle with length 15 and width 8 is _____

(48) $(81^2 \times 4) \div 3$ has a remainder of _____

(49) $143 \times 35 =$ _____

*(50) $\pi^8 =$ _____

(51) $32 \times \frac{32}{29} =$ _____ (mixed number)

(52) $19 \times \frac{19}{17} =$ _____ (mixed number)

(53) $8^2 + 24^2 =$ _____

(54) $\frac{5! + 7!}{5!} =$ _____

(55) The largest palindrome smaller than 200 is _____

(56) If $\frac{1}{2} - \frac{1}{8} = \frac{1}{x}$, then $x =$ _____

(57) 50° Celsius = _____ ° Fahrenheit

(58) $3367 \times 39 =$ _____

(59) $\{b, o, y, d\} \cap \{r, h, o, m, e\}$ has _____ elements

*(60) $\pi^7 =$ _____

(61) $\frac{24}{23} \times 24 =$ _____ (mixed number)

(62) $\frac{\pi}{8}$ radians = _____ °

(63) $\frac{1^3 + 2^3 + \ldots + 7^3}{1 + 2 + \ldots 7} =$ _____

(64) If $63^2 - 37^2 = 100k$, then $k =$ _____

(65) $\sqrt{6724} =$ _____

(66) $723 \times 111 =$ _____

(67) The probability of obtaining a sum of 10 when rolling a pair of dice is _____

(68) $41 \times 52 =$ _____

(69) $38^2 + 77^2 =$ _____

*(70) $\sqrt{60000} =$ _____

(71) The probability of choosing a one digit number that is a divisor of 12 is _____

(72) The odds of getting a sum of 3 when rolling 2 dice is _____

(73) If $\log_x 16 = 1$, then $x =$ _____

(74) The odds of randomly choosing a consonant from the word $COTANGENT$ is _____

(75) The sum of the roots of $3x^2 - x - 3 = 0$ is _____

(76) The sum of the 5th pentagonal number and the 5th triangular number is _____

(77) IF $2^x = P$, $5^x = Q$, and $5000^x = P^r Q^s$, then $r + s =$ _____

(78) If $x = 11$, then $x^2 - 12x + 36 =$ _____

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

*(80) $\sqrt[3]{12000} =$ _____