(1) \(\frac{4}{9} \div .3 = \) ________________

(2) \(19 \times 17 + 11 \times 17 = \) ________________

(3) \(75 \times 44 = \) ________________

(4) \(2014 \times 4 + 6 = \) ________________

(5) \(\frac{7}{80} = \) ________________ % (decimal)

(6) \(319 + 2016 - 513 = \) ________________

(7) \(23 \times 14 = \) ________________

(8) \(\frac{3\frac{1}{3}}{\frac{5}{2}} = \) ________________

(9) \((5 + 10) \times 15 \div (20 - 25) = \) ________________

*(10) \(41 \times 411 + 4111 = \) ________________

(11) \(15 \times 38 = \) ________________

(12) \(23 \times \frac{23}{25} = \) ________________ (mixed number)

(13) The GCD of 78 and 26 is ________________

(14) The largest prime divisor of 51 is ________________

(15) \(26 \times 62 = \) ________________

(16) \(\frac{15}{19} \times 15 = \) ________________ (mixed number)

(17) \(23.4\) milligrams = ________________ grams

(18) The median of 12, 20, 8, 14, 22, and 12 is ________________

(19) 1 rod + 2 yards = ________________ feet

*(20) \(20708 \div 278 = \) ________________

(21) If \(x + y = 5\) and \(y - x = 3\), then \(y = \) ________________

(22) The set \(\{l, i, n, e, a, r\}\) has ___ 4-elements subsets

(23) \(63 \times 429 = \) ________________

(24) Six tablespoons is ________________ % of a cup

(25) 10 plus \(x\) is the same as tripling \(x\). \(x = \) ________________

(26) \(2008 = \) ________________

(27) \((112 + 17 \times 25) \div 8\) has a remainder of ________________

(28) \(.333\ldots \times .1666\ldots + .08333\ldots = \) ________________

(29) Which of the following is an evil number: 11, 13, or 15? ________________

*(30) \(\frac{2}{3} \times 32016 \div 7 = \) ________________

(31) If \(a = 4\) and \(b = 3\), then \((a - b)(a^2 + ab + b^2) = \) ________________

(32) If \(x = 9\) and \(y = 4\), then \(x^2 - 2xy + y^2 = \) ________________

(33) Which of the following is an abundant number: 40, 41, or 42? ________________

(34) \(14 \times \frac{17}{20} = \) ________________

(35) If \(\sqrt{5 - \sqrt{3 + \sqrt{x}}} = 1\), then \(x = \) ________________

(36) \(3 \times 2! + 4 \times 3! + 5 \times 4! = \) ________________

(37) 15% of ________________ is 21% of 35.

(38) \(2459 \div 799 = \) ________________

(39) Let \(A = \{l, y, n, d, a\}\) and \(B = \{d, o, y, c, e\}\), then \(A \cup B\) has how many elements? ________________

*(40) \(\sqrt{13579} = \) ________________

(41) \(12^3 \div 6^3 \times 3^3 = \) ________________

(42) Find the smallest prime number \(p > 0\) such that \(5p - 4\) is also a prime number. ________________

(43) The area of a trapezoid with a height of \(3''\), and bases of \(5''\) and \(7''\) is ________________ sq. in.

(44) The \(x\)-intercept of the line going through \((1, 3)\) and \((3, 5)\) is \((x, y)\). \(x = \) ________________
(45) 2347 − 567 = 7
(46) The first 4 digits of \( \frac{245}{990} \) is 0.
(47) If \( x < 3 \), then \( x^2 + 1 < \) ____________________________
(48) Find the distance between the lines \( x + y = 2 \) and \( x + y = 3 \).
(49) 2.3 + 0.23 + 0.023 + 0.0023 = ____________________________
(50) \( 24^2 \times 21^2 \div 3^4 = \) ____________________________
* (51) \( (3 - 2/mboxi)^2 = \) ____________________________
(52) 45 degrees = \( \frac{\pi}{k} \) radians. Find \( k \).
(53) A convex polygon has 27 distinct diagonals. How many sides does it have?
(54) If \( (3 + 2i)^2 = a + bi \), then \( b = \) ____________________________
(55) \( 77516 \div 11 \) has a remainder of ____________________________
(56) The slope of the line containing the points \((-1, 2)\) and \((-3, 4)\) is ____________________________
(57) \( (4 + ki)^2 = -33 + 56i \). Find \( k \).
(58) If \( \log_3 \left( \frac{1}{27} \right) = x \), then \( x = \) ____________________________
(59) If \( \frac{x-7}{x+8} + \frac{x+8}{x-7} \) is written as a mixed number \( A \frac{B}{C} \), then \( B = \) ____________________________
* (60) \( 13^4 = \) ____________________________
(61) Find \( k \), \( 0 \leq k \leq 8 \), if \( 3k + 5 \equiv 14 \pmod{9} \).
(62) If \( \begin{bmatrix} 4 & 2 \\ 1 & 1 \end{bmatrix} \times \begin{bmatrix} 0 & 1 \\ 2 & 3 \end{bmatrix} = \begin{bmatrix} a & b \\ c & d \end{bmatrix} \), then \( a + b = \) ____________________________
(63) \( 4^1 - 4^0 + 4^{-1} - 4^{-2} + \ldots = \) ____________________________
(64) The minimum value of \( f(x) = 2 - 3 \cos(x) = \) ____________________________
(65) \( 2! + 3! + 4! \equiv x \pmod{5} \) and \( 0 \leq x \leq 4 \). \( x = \) ____________________________
(66) \( \sin(120^\circ) \times \tan(135^\circ) \times \cos(150^\circ) = \) ____________________________
(67) \( \tan[\cot^{-1} \left( \frac{4}{3} \right) ] = \) ____________________________
(68) \( \sqrt{7.3441} = \) ____________________________ (decimal)
(69) \( (2x^3 + 3x^2 - 4x - 5) \div (x+1) \) has a remainder of ____________________________
* (70) \( 16667 \times 369 = \) ____________________________
(71) The perimeter of a square is increased from \( 18'' \) to \( 34'' \). Find the corresponding increase in the area of the square. ____________________________ sq. in.
(72) If \( f(x) = \frac{5x + 3}{x - 1} \), then \( f'(2) = \) ____________________________
(73) Find the maximum product of \( x \) and \( y \) if \( x + y = 22 \), and \( x, y > 0 \). ____________________________
(74) \( 998 \times 997 = \) ____________________________
(75) \( g(x) = 2x + 3 \) and \( h(x) = 2 - 3x \). \( g(h(4)) = \) ____________________________
(76) If \( f(x) - \frac{2x - 3}{4} \), then \( f^{-1}(3) = \) ____________________________
(77) \( (x^3 - 2x^2 + 4x - 1) \) divided by \( (x - 2) \) has a remainder of ____________________________
(78) If \( f(x) = .5x^2 - 3x + 1 \), then \( f'(2) = \) ____________________________
(79) If \( \begin{bmatrix} 3 & 1 \\ 2 & 2 \end{bmatrix} \times \begin{bmatrix} 2 & 1 \\ 4 & 1 \end{bmatrix} = \begin{bmatrix} a & b \\ c & d \end{bmatrix} \), then \( b = \) ____________________________
* (80) \( 875 \times 62.5 \div 3 \frac{5}{8} = \) ____________________________