

Number Sense Exam 004, 12/16/2016

- (1) $4 - 6 \times 8 + 10 =$ _____
- (2) $\frac{7}{9} =$ _____, % (mixed number)
- (3) $\$17.97 + \$12.48 = \$$ _____
- (4) $264 \div 22 =$ _____
- (5) $\frac{4}{5} \times \frac{5}{6} =$ _____
- (6) $11 \times 139 =$ _____
- (7) $1\frac{1}{16}\% =$ _____ (decimal)
- (8) $25^2 =$ _____
- (9) $31 \times 27 + 19 \times 27 =$ _____
- *(10) $135 + 246 + 789 =$ _____
- (11) $(34 + 65 + 96) \div 3$ has a remainder of _____
- (12) The LCM of 54 and 48 is _____
- (13) $7 + 16 \div 5 \times 10 =$ _____
- (14) 64 is %16 of _____
- (15) Which is smaller, $\frac{7}{11}$ or $\frac{11}{13}$? = _____
- (16) MMX - II = _____ (Arabic Numeral)
- (17) 26 is 65% of what? _____
- (18) $11^5 \div 121 =$ _____
- (19) The mode of 1, 2, 1, 3, 2, 1, and 3 is _____
- *(20) $224488 \div 111 =$ _____
- (21) 30 minus 40% of 50 is _____
- (22) $(16 + 3 \times 13) \div 7$ has a remainder of _____
- (23) What number subtracted from 7 and multiplied by 6 gives the same results? _____
- (24) $.212121 \dots =$ _____ (proper fraction)
- (25) $.125 - .375 - .625 =$ _____ (proper fraction)
- (26) 24% of 25 is 20% of _____
- (27) The number of positive integral divisors of 48 is _____
- (28) What number times 6 and subtracted from 35 gives the same result? _____
- (29) $2\frac{2}{5} \times 8\frac{2}{5} =$ _____
- *(30) $14^4 =$ _____
- (31) If $f(x) = 4x^2 - 12x + 9$ then $f(9) =$ _____
- (32) $4\frac{3}{5} \times 4\frac{2}{3} =$ _____ (mixed number)
- (33) $(65 - 4 \times 3) \div 6$ has a remainder of _____
- (34) The number of positive integral divisors of 404 is _____
- (35) 24% of 16 is _____ % of 48
- (36) $f(x) = 9x^2 + 12x + 4$, evaluate $f(2)$. _____
- (37) $5\frac{1}{4} \times 5\frac{3}{4} =$ _____ (mixed number)
- (38) $5.3 \times 4.7 =$ _____ (decimal)
- (39) If $x^3 + 30 = 3$ then $x =$ _____
- *(40) $39 \times 49 \times 29 =$ _____
- (41) The perimeter of a square whose diagonal is $2\sqrt{2}$ inches is _____ inches
- (42) $48 \times 11 + 44 \times 12 =$ _____
- (43) $35\frac{5}{7}\% =$ _____ (proper fraction)
- (44) $7! \div 5! =$ _____
- (45) If the GCD of x and 20 is 5 and their LCM is 180, then $x =$ _____
- (46) $33 \div 3.75 =$ _____ (decimal)

- (47) $9^6 \times 9^{-4} \div 9^{-2} = 9^k$, then $k =$ _____
- (48) The hypotenuse of a right triangle with integral sides is 41 in. The shortest leg is _____ in
- (49) If the legs of a right triangle are 36 and 15 then its hypotenuse is _____
- *(50) $22^3 \times 33^2 \div 11^4 =$ _____
- (51) $36^2 + 57^2 =$ _____
- (52) The vertex of the parabola $y = 3x^2 + 12x + 4$ is (h, k) and $k =$ _____
- (53) An equilateral triangle has an area of $27\sqrt{3}$ sq. cm. Its height is _____ cm.
- (54) The product of the coefficients of $(a + b)^5$ is _____
- (55) $49 \times 41 - 9 =$ _____
- (56) $151 \times 115 =$ _____
- (57) $9 + 3 + 1 + \frac{1}{3} + \dots =$ _____
- (58) If $\log_4(.5) = k$, then $k =$ _____
- (59) ${}_6C_3 =$ _____
- *(60) $58333 \div 777 \times 75 =$ _____
- (61) The area of the ellipse $4x^2 + 9y^2 = 36$ is $k\pi$ and $k =$ _____
- (62) $\frac{1}{15} + \frac{1}{21} + \frac{1}{28} =$ _____ (proper fraction)
- (63) $999 \times \frac{3}{37} =$ _____
- (64) $777 \times \frac{7}{37} =$ _____
- (65) $(2468_9 + 1357_9) \div 8$ has a remainder of _____
- (66) The remainder, in base 6, when 234 is divided by 6 is _____
- (67) Find the volume of a pyramid if the area of the base is 19.5 sq. in. and its height is 6in. ___ cu. in.
- (68) $69^2 + 69 =$ _____
- (69) How much time has past from 3:45pm to 4:00pm in one day? _____ seconds
- *(70) $(e\pi)^2 \times (\pi e)^2 =$ _____
- (71) Find x if $\det \begin{vmatrix} 3 & 9 \\ 4 & x \end{vmatrix} = 6$. $x =$ _____
- (72) $2 \times 3 \times 11 \times 13 =$ _____
- (73) If $f(x) = 3x - 1$ and $g(x) = 2$ then $f(g(x)) =$ _____
- (74) $\int_2^6 x \, dx =$ _____
- (75) $111 \times 45 =$ _____
- (76) A vertical asymptote for $y = \frac{1}{x+1}$ is $x =$ _____
- (77) The sum of the first nine terms of the Fibonacci sequence 2, 4, 6, 10, 16, ... is _____
- (78) A vertical asymptote of $y = \frac{x^2 + 1}{x + 1}$ _____
- (79) If $f(x) = 4 - 3x - 2x^2$ then $f'(-1) =$ _____
- *(80) $797 \div 87.5\% \times \frac{7}{10} =$ _____