

Number Sense Exam 038, 8/30/2017

- (1) $123\frac{4}{5}\%$ = _____ (decimal)
- (2) 13×18 = _____
- (3) 56% = _____ (proper fraction)
- (4) $2 + 0 \times 0 - 1$ = _____
- (5) 32^2 = _____
- (6) $2909 + 2090$ = _____
- (7) 14^2 = _____
- (8) 65×56 = _____
- (9) $22\frac{2}{9}\%$ = _____ (proper fraction)
- *(10) $13 + 135 + 1357 + 13579$ = _____
- (11) The mean of 1, 5, 12, 22, and 35 is _____
- (12) The average of 18, 29, and 16 is _____
- (13) 21^2 = _____
- (14) If 1cm = .39in., then 3 meters = _____ inches.
- (15) $1\frac{5}{6} \div 11$ = _____
- (16) MMCDI = _____ (Arabic Numeral)
- (17) 57×57 = _____
- (18) $72 \div 18 + 2 \times 6$ = _____
- (19) $7 + 16 \div 5 \times 10$ = _____
- *(20) 7532×1468 = _____
- (21) The time it will take Ted to drive 360 miles at an average speed of 45 mph is _____ hours
- (22) $0.125 \div 0.625$ = _____
- (23) If 25 pens cost \$42.00, then 10 pens cost \$ _____
- (24) If $f(x) = x^2 + 8x + 16$, then $f(26)$ is _____
- (25) If 4 pens cost \$2.84, then one dozen pens cost \$ _____
- (26) $2 - |1 - 3| - |4 - 7|$ = _____
- (27) $1 + 1 + 2 + 3 + 5 + \dots + 21 + 34$ = _____
- (28) 28 is what percent more than 24? _____ %
- (29) If 6 oz. of candy costs \$0.96, then one pound of candy costs _____
- *(30) $108 \times 119 + 12 \times 121$ = _____
- (31) How far do you travel in 2 hrs and 20 minutes at a constant speed of 60 miles per hour? _____ miles
- (32) The smallest prime number greater than 50 is _____
- (33) $f(x) = 2x^2 - 3x - 4$. Evaluated $f(5)$. _____
- (34) $\sqrt[3]{551368}$ = _____
- (35) $4\frac{3}{8} \div 2\frac{1}{3}$ = _____ (mixed number)
- (36) Find the slope of the line perpendicular to the line $6x - 2y = 4$. _____
- (37) If $3.2 \times k = 1$, then k = _____
- (38) 14443×14 = _____
- (39) $3\frac{1}{3} \div 1\frac{2}{3}$ = _____
- *(40) $\sqrt[3]{1329} \times \sqrt{123} \times 11$ = _____
- (41) $\frac{8}{11} - \frac{31}{45}$ = _____
- (42) 124×142 = _____
- (43) given $1190 \div 34 = 35$. Find $1190 \div 4.25$. _____
- (44) A triangle has sides of 9, x , and 13. What is the greatest integral value of x ? _____
- (45) A hexagon has _____ distinct diagonals

- (46) A right triangle has integral sides. If one leg is 13 then the other leg is _____
- (47) The perimeter of a square whose diagonal is $2\sqrt{2}$ inches is _____ inches
- (48) If $3x - 2y = 7$ and $3x - y = 9$, then $y =$ _____
- (49) $40_5 - 12_5 - 11_5 =$ _____ $_5$
- *(50) $171097 \div 111 =$ _____
- (51) If $\frac{a}{9}$ has a remainder of 7 and $\frac{b}{9}$ has a remainder of 5 then $\frac{ab}{9}$ has a remainder of _____
- (52) The vertex of the parabola $y = x^2 - 10x$ is (h, k) , and $k =$ _____
- (53) $222 \times \frac{5}{37} =$ _____
- (54) $12 + 9 + 6.75 + \dots =$ _____
- (55) The simplified coefficient of the x^2y term in the expansion of $(x - 3y)^3$ is _____
- (56) The expansion of $(3x + 4y)^5$ has _____ terms
- (57) If $3^x = 1.2$ then $9^x =$ _____
- (58) The shortest leg of a 30° - 60° - 90° right triangle is $\frac{3''}{4}$ long. The hypotenuse is _____ inches.
- (59) $\frac{4 \times 5! + 5 \times 4!}{4!} =$ _____
- *(60) $32 \times 33 + 27 \times 26 =$ _____
- (61) The horizontal phase shift of $f(\theta) = 3 \cos(4\pi\theta - 6\pi) + 5$ is _____
- (62) $42_5 \times 4_5 =$ _____ $_5$
- (63) The circumference of the circumscribed circle around a 20, 21, 29-right triangle is $k\pi$. $k =$ _____
- (64) The area of the base of a pyramid is 25 sq. in. The height of the pyramid is 12 in. The volume of the pyramid is _____ cu. in.
- (65) The sum of the coefficients of $(x - y)^3$ is _____
- (66) The product of the GCD and LCM of 9 and 13 is _____
- (67) The diameter of the circumscribed circle around a 7, 24, 25-right triangle is _____
- (68) $(4 + 5i)^2 = a + bi$, $a =$ _____
- (69) $444 \times \frac{5}{37} =$ _____
- *(70) $94 \times 96 \times 102 \times 104 =$ _____
- (71) If $f(3) = 7$, then $f^{-1}(7) =$ _____
- (72) The greatest integer function is written as $f(x) = [x]$. Find $[\sqrt{7} - \sqrt{3}]$. _____
- (73) $\int_1^3 (2x + 3) dx =$ _____
- (74) $\int_0^1 \sqrt{x} dx =$ _____
- (75) The third largest perfect number is _____
- (76) The sum of the first ten terms of the sequence 4, 6, 10, 16, 26, 42, ... is _____
- (77) If $f(x) = x^3 - 3x + 3$, then $f''(2) =$ _____
- (78) $2^6 \times 5^4 =$ _____
- (79) Change .32 base 4 to a base 10 fraction. _____
- *(80) $250 \sin\left(\frac{44\pi}{90}\right) =$ _____