

## Number Sense Exam

- (1)  $16^2 =$  \_\_\_\_\_
- (2)  $36 + 4(3 + 7) =$  \_\_\_\_\_
- (3)  $67 \times 7 =$  \_\_\_\_\_
- (4)  $.25 + 6 + \frac{3}{4} =$  \_\_\_\_\_
- (5)  $117 \div 9 =$  \_\_\_\_\_
- (6)  $12^2 =$  \_\_\_\_\_
- (7)  $\frac{11}{25} =$  \_\_\_\_\_ %
- (8)  $\frac{17}{25} =$  \_\_\_\_\_ %
- (9)  $50 \times 82 =$  \_\_\_\_\_
- \*(10)  $31315 + 92214 + 162 =$  \_\_\_\_\_
- (11)  $14 \times 96 + 81 \times 96 =$  \_\_\_\_\_
- (12) 19 quarters plus 4 dimes = \$ \_\_\_\_\_
- (13) 215% = \_\_\_\_\_ (decimal)
- (14)  $\frac{1}{2} + \frac{9}{10} =$  \_\_\_\_\_ (mixed number)
- (15)  $55^2 =$  \_\_\_\_\_
- (16)  $17 - 5(9 - 6) =$  \_\_\_\_\_
- (17)  $4\frac{1}{4} + 3\frac{3}{4} - 3\frac{2}{3} =$  \_\_\_\_\_
- (18)  $18 \times 24 + 18 \times 16 =$  \_\_\_\_\_
- (19)  $3248 \div 8 =$  \_\_\_\_\_
- \*(20)  $243 \times 342 =$  \_\_\_\_\_
- (21)  $12 \times 87 =$  \_\_\_\_\_
- (22)  $88 \times 75 =$  \_\_\_\_\_
- (23) The cost of renting scaffolding for 5 days at \$23.50 per day \$ \_\_\_\_\_
- (24) If  $\frac{8}{x} = \frac{9}{11}$ , then  $x =$  \_\_\_\_\_
- (25)  $(-6) + 11 + (-2) - (-5) =$  \_\_\_\_\_
- (26)  $18 \times 31 - 18 \times 27 =$  \_\_\_\_\_
- (27)  $95^2 =$  \_\_\_\_\_
- (28) The perimeter of a square with side 2017 is \_\_\_\_\_
- (29) If  $\frac{5}{x} = \frac{3}{11}$ , then  $x =$  \_\_\_\_\_
- \*(30) 42% of 12018 = \_\_\_\_\_
- (31)  $62^2 - 48^2 =$  \_\_\_\_\_
- (32) The GCF of 45 and 51 is \_\_\_\_\_
- (33) If  $13x - 6x = 2$ , then  $x =$  \_\_\_\_\_
- (34)  $109 \times 103 =$  \_\_\_\_\_
- (35) 32 has how many positive integral divisors? \_\_\_\_\_
- (36)  $3.2 \times 3.8 =$  \_\_\_\_\_ (decimal)
- (37) If  $a = 5, b = 4, c = 2$ , then  $a\sqrt{c^b} =$  \_\_\_\_\_
- (38) If the area of a circle with diameter 8 cm is  $a\pi$  sq. cm., then  $a =$  \_\_\_\_\_
- (39) The total cost of a \$400 item with a 7.5% sales tax is \$ \_\_\_\_\_
- \*(40)  $483 \times 487 =$  \_\_\_\_\_
- (41)  $43_{12} =$  \_\_\_\_\_ 10
- (42) The total number of diagonals that can be drawn in a nonagon is \_\_\_\_\_
- (43)  $(92 \times 13) \div 11$  has a remainder of \_\_\_\_\_
- (44)  $121_3 =$  \_\_\_\_\_ 10
- (45) 14 is \_\_\_\_\_ % of 56
- (46)  $33_5 =$  \_\_\_\_\_ 10

- (47) 12% of 48 is 36% of \_\_\_\_\_
- (48)  $32 \times 16 =$  \_\_\_\_\_
- (49) 18% of 46 is 9% of \_\_\_\_\_
- \*(50) The sum of the interior angles of a 74-sided polygon is \_\_\_\_\_
- (51) The sum of the three interior angles of an isosceles triangle is  $^\circ$  \_\_\_\_\_
- (52) The 16th term of the sequence 4, 10, 16, 22, ... is \_\_\_\_\_
- (53)  $59^\circ$  Fahrenheit = \_\_\_\_\_  $^\circ$  Celsius
- (54) The area of a square with a diagonal 8 in. is \_\_\_\_\_ sq. in.
- (55) 45 miles per hour = \_\_\_\_\_ feet per second
- (56)  $45_7 \times 3_7 =$  \_\_\_\_\_  $_7$
- (57)  $1 + 4 + 7 + \dots + 34 =$  \_\_\_\_\_
- (58) 3 ft.  $\times$  27 ft.  $\times$  9 ft. = \_\_\_\_\_ cu. yards
- (59)  $\{A, B, C, D\} \cup \{E, A, F, B, G\}$  has \_\_\_\_\_ elements
- \*(60) The volume of a  $19 \times 21 \times 49$  rectangular prism is \_\_\_\_\_
- (61) If  $3x^2 - 9x - 11 = (ax - p)(bx - q)$ , then  $abpq =$  \_\_\_\_\_
- (62)  $1015 \times 1010 =$  \_\_\_\_\_
- (63)  $84_9 - 27_9 =$  \_\_\_\_\_  $_9$
- (64) If  $3x - 5 > 19$ , then the smallest integer solution of  $x$  is \_\_\_\_\_
- (65)  $\frac{19}{14} \times 19 =$  \_\_\_\_\_ (mixed number)
- (66) If the hypotenuse of a right triangle with integer sides is 41, then the perimeter is \_\_\_\_\_
- (67) The 8th pentagonal number is \_\_\_\_\_
- (68) If the hypotenuse of a right triangle is 37 and a leg is 35, then the other leg is \_\_\_\_\_
- (69)  $34_6 \times 2_6 =$  \_\_\_\_\_  $_6$
- \*(70) The hypotenuse of a right triangle with legs of 60 and 70 is \_\_\_\_\_
- (71) If  $360^\circ = a\pi$  radians, then  $a =$  \_\_\_\_\_
- (72)  $\frac{1 + 3 + 5 + \dots + 35}{1 + 3 + 5 + \dots + 11} =$  \_\_\_\_\_
- (73) The product of the roots of  $(x - 3)(3x - 5) = 0$  is \_\_\_\_\_
- (74)  $\frac{\pi}{2}$  radians = \_\_\_\_\_  $^\circ$
- (75)  $6\frac{1}{3} \times 9\frac{2}{3} =$  \_\_\_\_\_ (mixed number)
- (76) The sum of the roots of  $x^2 + 5x - 14 = 0$  is \_\_\_\_\_
- (77) The product of the GCF and the LCM of 12 and 9 is \_\_\_\_\_
- (78)  $i^{38} =$  \_\_\_\_\_
- (79) If  $a, b, c > 0$ , then  $\sqrt{a^3bc^2 \times a^5bc^4} =$  \_\_\_\_\_
- \*(80)  $12 \times 13 \times 14 =$  \_\_\_\_\_