

Middle School Number Sense Exam 028, 12/1/2017

- (1) $\frac{34}{20} =$ _____ %
- (2) $104 \times 25 =$ _____
- (3) $.08 \times .035 =$ _____ (decimal)
- (4) $998 + 1997 + 3996 =$ _____
- (5) $54\% =$ _____ (fraction)
- (6) $11 + 12 + 13 =$ _____
- (7) $21^2 =$ _____
- (8) $\frac{5}{8} =$ _____ %
- (9) $1616 \div 2 =$ _____
- *(10) $18 \times 412 =$ _____
- (11) $111 \times 73 =$ _____
- (12) $12\frac{1}{2} \times 88 =$ _____
- (13) $\frac{7}{250} =$ _____ (decimal)
- (14) $1 + 2 + 3 + 4 + \dots + 4 =$ _____
- (15) $95^2 =$ _____
- (16) $\frac{31}{50} =$ _____ %
- (17) $35 \times 82 =$ _____
- (18) $.0008 \times 10^5 =$ _____
- (19) $66\frac{2}{3} \times 45 =$ _____
- *(20) $74 \times 662 =$ _____
- (21) $\frac{8}{13} + \frac{13}{8} =$ _____ (mixed number)
- (22) $6\frac{2}{9}\% =$ _____ (fraction)
- (23) The selling price of a \$35 item with a 25% markup is \$ _____
- (24) $12314 \div 4$ has a remainder of _____
- (25) The area of a rhombus with diagonals 22 ft. and 18 ft. is _____ sq. ft.
- (26) The remainder of $6721 \div 9$ is _____
- (27) The sum of the smallest 11 positive even integers is _____
- (28) $(-2)(-2)(2)(-2)(2) =$ _____
- (29) $143 \times 42 =$ _____
- *(30) $18^2 + 19^2 + 20^2 =$ _____
- (31) $17 \times 24 + 24 \times 13 =$ _____
- (32) $0.4\bar{6} =$ _____ (fraction)
- (33) 12% of 80 is _____
- (34) The number halfway between 146 and 392 is _____
- (35) If $a = 8$ and $b = 4$, then $\frac{a^2}{b} =$ _____
- (36) $9\frac{1}{4} \times 9\frac{3}{4} =$ _____ (mixed number)
- (37) If $\frac{1}{3}(27n + 33) = 65$, then $n =$ _____
- (38) The diagonal of a square with side 4 yds. is _____ yds.
- (39) If $12(2n + 1) = 6$, then $n =$ _____
- *(40) $3\pi^4 =$ _____
- (41) $1 + 2 + 3 + \dots + 99 + 100 =$ _____
- (42) $32_{10} =$ _____ ₅
- (43) 32 ounces = _____ pounds
- (44) If $5 + 10 + 15 + \dots + 60 = 5k$, then $k =$ _____
- (45) $12_{10} =$ _____ ₄
- (46) $17 \times 38 - 17 \times 8 =$ _____

- (47) $\{A, B, C, D, E, F, G, H\}$ has _____ elements
- (48) $-70^2 =$ _____
- (49) $(83 - 38) \div 9$ has a remainder of _____
- *(50) $672 \div 8.5 \times 17 =$ _____
- (51) $\sqrt{48 \times 42 + 9} =$ _____
- (52) $32 \times 16 =$ _____
- (53) $(32_7)^2 =$ _____ $_7$
- (54) $\frac{1}{11}$ gallon = _____ cu. in.
- (55) If $23_b = 21_{10}$, then $b =$ _____
- (56) $\frac{1}{8}$ sq. mile = _____ acres
- (57) $\frac{1}{8}$ sq. ft. = _____ sq. inches
- (58) The geometric mean of
2, 4, and 8 is _____
- (59) The 21st term in the sequence
5, 8, 11, 14, ... is _____
- *(60) $\sqrt[3]{340000} =$ _____
- (61) The probability of getting a sum of 9 when rolling
a pair dice is _____
- (62) $235 \times 111 =$ _____
- (63) 44 feet per secon = _____ miles per hour
- (64) $\frac{14}{16} \times 14 =$ _____ (mixed number)
- (65) The surface area of a cube with inner diagonal
13 cm. is _____ sq. cm.
- (66) The sum of the infinite geometric series
 $5 + 2.5 + 1.25 + 0.625 + \dots =$ _____
- (67) $0.4666\dots =$ _____ (fraction)
- (68) If $x^2 - 14x + 12 = (x - p)(x - q)$, where p and q
are real numbers, then $p + q =$ _____
- (69) $60^\circ =$ _____ π radians
- *(70) The surface area of a rectangular prism with
measure 25 by 30 by 35 is _____
- (71) The product of the GCF and the LCM of
12 and 9 is _____
- (72) 44 feet per second = _____ miles per hour
- (73) The volume of a cube with inner diagonal 5 meters
is _____ cu. meters
- (74) $34_6 + 15_6 =$ _____ $_6$
- (75) If the x -intercept of $f(x) = x^2 - 8x + 3$ are $(p, 0)$
and $(q, 0)$, then $p + q =$ _____
- (76) $3\frac{1}{3} \times 9\frac{2}{3} =$ _____ (mixed number)
- (77) If $(x + 2)(x - 2) = x^2 + bx + c$, then $c =$ _____
- (78) $92^2 + 11^2 =$ _____
- (79) $306^2 =$ _____
- *(80) 312 sq. miles = _____ acres