# The University Interscholastic League
## Number Sense Test, Series E978C

Final _____ _____
2nd _____ _____
1st _____ _____
Score Initials

**Contestant's Number** _____

**Read Directions Carefully Before Beginning Test**

**Do Not Unfold This Sheet Until Told To Begin**

DIRECTIONS: Do not turn this page until the person conducting this test gives the signal to begin. This is a ten-minute test. There are 80 problems. Solve accurately and quickly as many as you can in the order in which they appear. ALL PROBLEMS ARE TO BE SOLVED MENTALLY. Make no calculations with paper and pencil. Write only the answer in the space provided at the end of each problem. Problems marked with a (*) require approximate integral answers; any answer to a starred problem that is within five per cent of the exact answer will be scored correct; all other problems require exact answers.

The person conducting this contest should explain these directions to the contestants.

**Stop - Wait for Signal!**

(1) $92 - 29 =$ _____ .

(2) $1812 \div 6 =$ _____ .

(3) $2 \times 7 \times 5 =$ _____ .

(4) Round 4391 to the nearest multiple of 100. _____ .

(5) XXXVII = _____ (Arabic Numeral).

(6) $17^2 =$ _____ .

(7) $3 \times 1000 + 2 \times 100 + 3 \times 10 =$ _____ .

(8) $35 \times 35 =$ _____ .

(9) $123 + 321 =$ _____ .

*(10) $12 + 122 + 1222 + 12222 =$ _____ .

(11) $4 + 15 =$ _____ (Roman Numeral).

(12) $7 + 7 + 14 =$ _____ .

(13) $1424 \div 3$ has a remainder of _____ .

(14) How many odd numbers are between 3 and 19? _____ .

(15) $25 \times 24 =$ _____ .

(16) $3 + 7 + 11 + 15 + 19 + 23 =$ _____ .

(17) $21 \times 9 - 1 =$ _____ .

(18) Write the number, "three hundred five". _____ .

(19) $11 \times 16 =$ _____ .

*(20) $29 \times 39 + 100 =$ _____ .

(21) $16 \div 2 \times 4 - 1 =$ _____ .

(22) The largest whole number less than 30 that is a multiple of 4 is _____ .

(23) Which is larger, $\frac{1}{4}$ or .24? _____ .

(24) $1.34 + 2.56 =$ _____ .

(25) Reduce $\frac{42}{66}$ to lowest terms. _____ .

(26) Which is smaller, $\frac{4}{7}$ or $\frac{3}{8}$? _____ .

(27) 34% = _____ (fraction).

(28) .42 = _____ (fraction).

(29) 39% = _____ (decimal).

*(30) $18325 \div 135 =$ _____ .

(31) $12 \times 18 =$ _____ .

(32) What is the smallest positive prime number? _____ .

(33) 3 yards = _____ inches.

(34) $\frac{3}{10} + .45 =$ _____ (decimal).

(35) .03 x .09 = _____ .

(36) If 4 pencils cost 52 cents, then one dozen pencils cost

$ _____ .

(37) 15 x 38 = _____ .

(38) What is the largest prime number less than 25? _____ .

(39) The GCF of 24 and 16 is _____ .

*(40) $4\frac{1}{4}$ x 5648 ÷ 17 = _____ .

(41) The LCM of 16 and 12 is _____ .

(42) 1.15 = _____ %.

(43) The largest prime factor of 30 is _____ .

(44) Find n if $\frac{2n}{3} = \frac{4}{9} \bullet n$ = _____ .

(45) $5\frac{1}{4} - 1\frac{3}{4}$ = _____ (Mixed Number).

(46) If n = 3 then 2n + 7 = _____ .

(47) $2\frac{1}{4} + 1\frac{1}{2}$ = _____ (Mixed Number).

(48) 2.16 ÷ .6 = _____ .

(49) $4\frac{1}{2}$ x 6 = _____ .

*(50) $\sqrt{2916}$ = _____ .

(51) $\frac{7}{9}$ x 7 = _____ (Mixed Number).

(52) If n = 4 then $n^2 - 5n$ = _____ .

(53) A circle has an area of $49\pi$ square inches. Its radius is _____ inches.

(54) 14 yards = _____ feet.

(55) If $12^2 + x^2 = 13^2$ then $x^2$ = _____ .

(56) $24_6$ = _____ 10.

(57) 75 x 24 = _____ .

(58) $6^3$ = _____ .

(59) A triangle has an area of 28 square inches. If its height is 8 inches, then its base is _____ inches.

*(60) 111 x 457 = _____

(61) If 2x + 1 = 5 then 2x − 1 = _____ .

(62) A rhombus has _____ congruent (equal) sides.

(63) $2\frac{1}{3}$ x $2\frac{2}{3}$ = _____ (Mixed Number).

(64) (-2) (13) (-3) = _____ .

(65) If 4 bananas cost $.84 then 3 bananas cost $ _____ .

(66) 64 ÷ (-4) = _____ .

(67) A parallelogram has a base of 6 inches and a height of 9 inches. Its area is _____ square inches.

(68) $2\frac{1}{4}$ x $6\frac{1}{4}$ = _____ (Mixed Number).

(69) 220 x 15 = _____ .

*(70) 19 x 21 + 20 x 22 = _____ .

(71) The reciprocal of $\frac{2}{3}$ is _____ .

(72) How far can you travel in 3 1/3 hours with a constant speed of 45 miles per hour? _____ miles.

(73) 40% of 120 = _____ .

(74) 96 x 98 = _____ .

(75) $17^2 - 16^2$ = _____ .

(76) The next term of 3, 7, 15, 31, ... is _____ .

(77) A box contains 5 red, 4 blue and 3 black balls. One ball is drawn. What is the probability that it is blue?

_____ .

(78) .393939... = _____ (fraction).

(79) 30% of 80 is _____ % of 40.

*(80) $(2 + 4 + 6 + 8 + 10 + 12)^2$ = _____ .