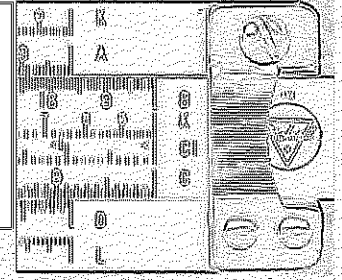
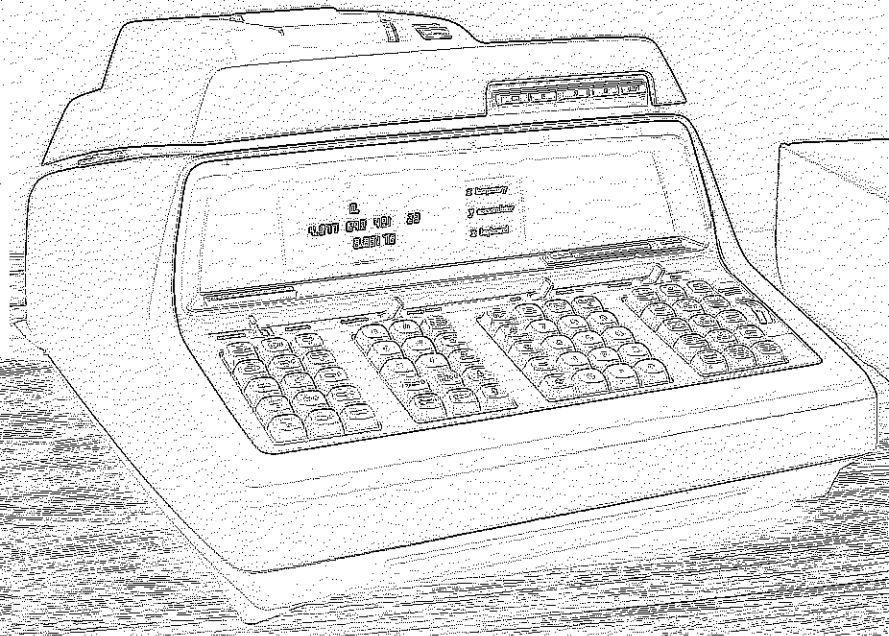
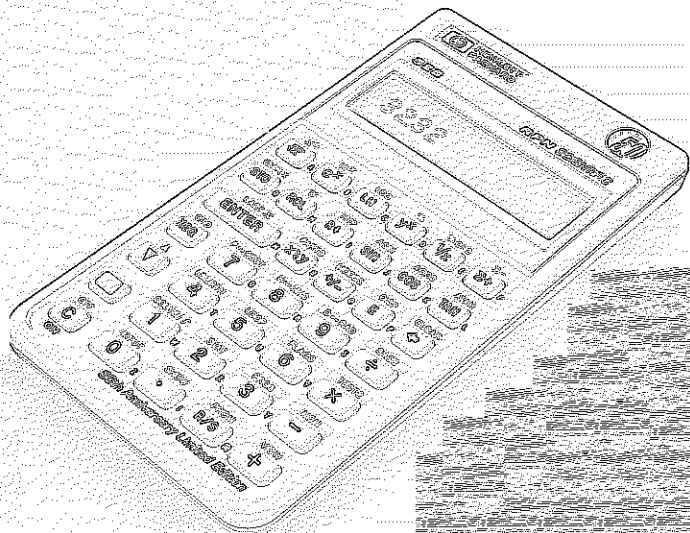
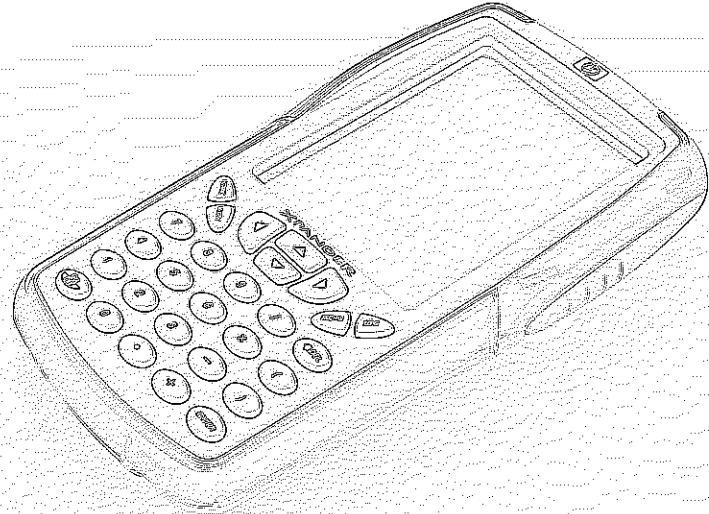
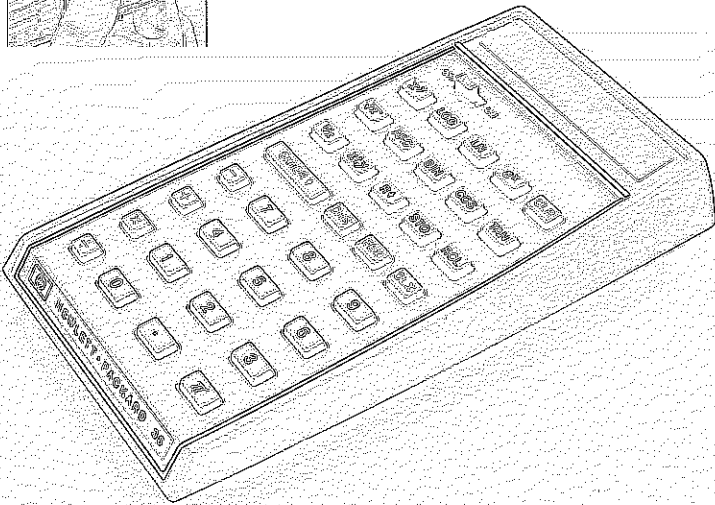
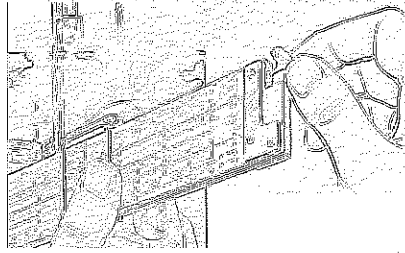
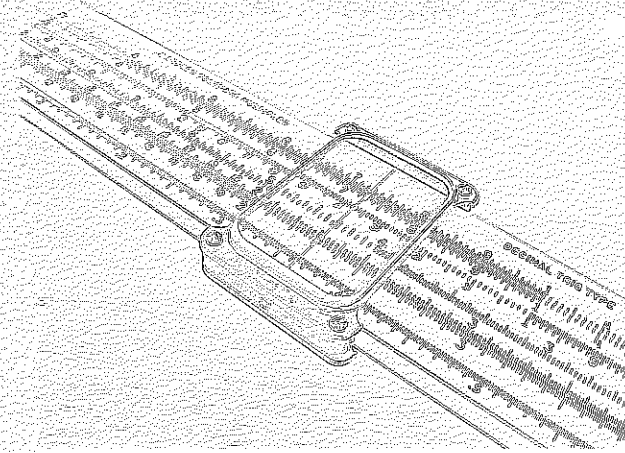
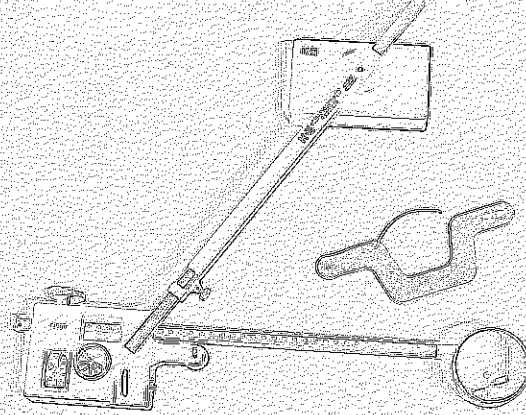
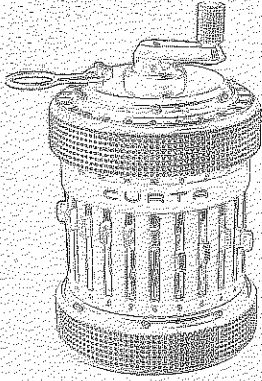


Texas Competitive Mathematics
Web - <http://www.texasmath.org>
Fax - (206) 666-MATH/(206) 666-6284
E-Mail - webmaster@texasmath.org



**1960-61 UIL Number Sense
(17 pages)**



The University of Texas Interscholastic League

Number Sense Test, Series T-01

Contestant's Number.....

Contestant's Score.....

**Read Directions Carefully
Before Beginning Test**

**Do Not Unfold This Sheet
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Directions: Do not turn this page until the person conducting the 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 star (*) require only approximate 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.

Person conducting contest should explain these directions carefully to the contestants.

Stop—Wait for Signal

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| <p>(1) $68 \div 28 =$</p> <p>(2) $83 - 28 =$</p> <p>(3) $16 \times 8 =$</p> <p>(4) $169 \div 13 =$</p> <p>(5) $56 + 167 =$</p> <p>(6) $50 \times 46 =$</p> <p>(7) 15% of 600 =</p> <p>(8) $3\frac{1}{4} \times 44 =$</p> <p>(9) $42 \div 1\frac{1}{2} =$</p> <p>(*10) $27 \times 46 =$</p> <p>(11) Find the interest on \$68 for one year at $2\frac{1}{2}\%$. \$.....</p> <p>(12) $68\text{¢} + 68\text{¢} + 34\text{¢} =$ \$.....</p> <p>(13) Find the average of 74, 18, 78 and 14.</p> <p>(14) 372 inches = feet.</p> <p>(15) 33 feet = inches.</p> <p>(16) $\frac{5}{8} - \frac{1}{4} + \frac{1}{2} =$</p> <p>(17) Find the area of a triangle of base 32 inches and altitude 8 inches. sq. in.</p> <p>(18) Find the cost of a house having 1150 square feet of floor area at \$9.00 a square foot. \$.....</p> <p>(19) Subtract \$8.39 from \$13.25. \$.....</p> <p>(*20) $3192 \div 38 =$</p> <p>(21) One-half of $3\frac{1}{3} =$</p> <p>(22) $\frac{1}{6}$ of $3\frac{1}{3} =$</p> <p>(23) $63 \div 1.05 =$</p> <p>(24) $\frac{1}{2}$ of $23\frac{1}{2} =$</p> <p>(25) $\frac{1}{4}$ of $23\frac{1}{2} =$</p> <p>(26) $25 \times 235 =$</p> <p>(27) Write in figures: sixty-one and five-eighths million.</p> <p>(28) If one Mexican peso equals 8 cents in U.S. currency, find the value in pesos of thirty dollars. pesos.</p> | <p>(29) Find the value in dollars of 1125 pesos. dollars.</p> <p>(*30) Estimate the value of 7665 bricks at $16\frac{1}{2}\text{¢}$ each. \$.....</p> <p>(31) $50 \times 62 =$</p> <p>(32) $25 \times 62 =$</p> <p>(33) $75 \times 62 =$</p> <p>(34) $125 \times 62 =$</p> <p>(35) $1550 \div 62 =$</p> <p>(36) $7750 \div 125 =$</p> <p>(37) $775 \div 1\frac{1}{4} =$</p> <p>(38) $84 \div 1\frac{3}{4} =$</p> <p>(39) $840 \div 17\frac{1}{2} =$</p> <p>(*40) A house containing 2350 square feet costs \$34,075. Estimate the cost per square foot. \$.....</p> <p>(41) Find the cost of 15 gallons of gas at 23¢ a gallon. \$.....</p> <p>(42) Find the cost of 15 gallons of gas at 24¢ a gallon. \$.....</p> <p>(43) Find the cost of 16 gallons of gas at 23¢ a gallon. \$.....</p> <p>(44) Find the cost of 15 gallons of gas at 23.6¢ a gallon. \$.....</p> <p>(45) $14\frac{1}{2} - 9\frac{3}{4} =$</p> <p>(46) $14\frac{1}{2} - 4\frac{3}{4} =$</p> <p>(47) $14\frac{1}{2} - 2\frac{1}{8} - 9\frac{3}{4} =$</p> <p>(48) Add \$11.50, \$17.85 and \$34.65. \$.....</p> <p>(49) Subtract the sum of \$17.85 and \$34.68 from \$64.22. \$.....</p> <p>(50) A man borrowed \$1775 and a year later repaid \$1885.94. Estimate the rate of interest.%</p> <p>(51) $\frac{3}{8}$ is what per cent less than $\frac{5}{8}$?%</p> <p>(52) $\frac{3}{4}$ is what per cent less than $\frac{1}{8}$?%</p> <p>(53) $\frac{1}{8}$ is what per cent more than $\frac{3}{4}$?%</p> <p>(54) 55 is five-sixths of what number?</p> <p>(55) 121 is one and three-eighths of what number?</p> <p>(56) The tax on a car valued at \$2000 is \$22. Find the tax rate.%</p> |
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- (57) $41:123=39:? \dots\dots\dots$
- (58) A farmer increases his cotton acreage 8% and now plants 162 acres in cotton. How many acres did he plant in cotton before the increase? $\dots\dots\dots$
- (59) The population of a town decreased 5% during the last ten years and is now 1710 inhabitants. What was the population ten years ago? $\dots\dots\dots$
- (*60) Nancy has \$2182.52 in a savings bank. She deposits sums of \$83.88 and \$214.95 and later withdraws sums of \$446.47 and \$584.75. How much does she have left on deposit? \$ $\dots\dots\dots$
- (61) $57 \times 1\frac{2}{3} = \dots\dots\dots$
- (62) $57 \times 2\frac{1}{3} = \dots\dots\dots$
- (63) $(57 \times 1\frac{1}{3}) + (57 \times 2\frac{2}{3}) = \dots\dots\dots$
- (64) $(57 \times 2\frac{2}{3}) - (57 \times 1\frac{1}{3}) = \dots\dots\dots$
- (65) $(57 \times 2\frac{1}{3}) - (57 \times 1\frac{2}{3}) = \dots\dots\dots$
- (66) $133 \div 2\frac{1}{3} = \dots\dots\dots$
- (67) $190 \div 1\frac{2}{3} = \dots\dots\dots$
- (68) $66\frac{1}{2} \div 2\frac{1}{3} = \dots\dots\dots$
- (69) $266 \div 4\frac{2}{3} = \dots\dots\dots$
- (*70) A speed of 1380 miles an hour is equivalent to how many feet a second? $\dots\dots\dots$
- (71) A car travels 352 miles on 11 gallons of gas. How many miles does it get to the gallon? $\dots\dots\dots$
- (72) Find the smallest integer greater than 1 that 119 is divisible by. $\dots\dots\dots$
- (73) A box contains 15 white balls and 25 black balls. What is the probability that a ball taken at random from the box is white? $\dots\dots\dots$
- (74) How many numbers between 40 and 100 are divisible by 7? $\dots\dots\dots$
- (75) What is the square root of 1225? $\dots\dots\dots$
- (76) Find the ninth term of the sequence $8\frac{1}{4}, 11\frac{1}{2}, 14\frac{3}{4}, 18, 21\frac{1}{4}, \dots\dots\dots$
- (77) Two cents are tossed. What is the probability that one will show heads and one will show tails? $\dots\dots\dots$
- (78) The base of a triangle remains fixed at 27 in. The altitude is increased from 13 in. to 17 in. Find the corresponding increase in area. $\dots\dots\dots$ sq. in.
- (79) The base of a triangle remains fixed at 27 in. The area is increased by 81 sq. in. Find the corresponding increase in the altitude. $\dots\dots\dots$ in.
- (*80) Estimate the area of a circle of circumference 35 feet. $\dots\dots\dots$ sq. ft.

The University of Texas Interscholastic League

Number Sense Test, Series T-02

Contestant's Number.....

Contestant's Score.....

**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 the 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 star (*) require only approximate 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.

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Stop—Wait for Signal

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| <p>(1) $29+39=$</p> <p>(2) $77+48=$</p> <p>(3) $113-66=$</p> <p>(4) $15\times 9=$</p> <p>(5) $15\frac{1}{2}\times 9=$</p> <p>(6) $225\div 15=$</p> <p>(7) $41+88+61=$</p> <p>(8) Find the area of a triangle of altitude 15 in. and base 18 in.
..... sq. in.</p> <p>(9) Find the side of a square of area 225 sq. in. in.</p> <p>(*10) Estimate the price paid for a steer weighing 922 lb. 13 oz. at 32¢ a pound. \$</p> <p>(11) Find the interest on \$3900 for 6 months at a rate of 8% a year. \$</p> <p>(12) $139\frac{1}{2}\div 9=$</p> <p>(13) $139\frac{1}{2}\div 15\frac{1}{2}=$</p> <p>(14) $279\div 31=$</p> <p>(15) Find the sum of \$11.23, \$8.81, and \$8.77. \$</p> <p>(16) Find the cost of 15 gallons of gas at 24¢ a gallon. \$</p> <p>(17) Find the cost of 17 gallons of gas at 24¢ a gallon. \$</p> <p>(18) Find the cost of 15 gallons of gas at 24.6¢ a gallon. \$</p> <p>(19) Find the cost of 17 gallons of gas at 27¢ a gallon. \$</p> <p>(*20) $1368\div 38=$</p> <p>(21) Find the cost of $16\frac{1}{2}$ gallons of gas at 24¢ a gallon. \$</p> <p>(22) Given that $37.4\times 11.6=433.84$, find $433.84\div 11.6$.</p> <p>(23) $433.84\div 37.4=$</p> <p>(24) $37.4\times 5.8=$</p> <p>(25) $18.7\times 11.6=$</p> <p>(26) $18.7\times 5.8=$</p> | <p>(27) $43.384\div 1.16=$</p> <p>(28) $4338.4\div 3.74=$</p> <p>(29) $433.84\div 5.8=$</p> <p>(*30) 87% of \$2940 = \$</p> <p>(31) $41\frac{1}{2}-7\frac{3}{4}=$</p> <p>(32) $41\frac{1}{2}-7\frac{3}{4}-9\frac{7}{8}=$</p> <p>(33) $41\frac{1}{2}+7\frac{3}{4}-9\frac{7}{8}=$</p> <p>(34) Subtract the sum of \$7.75 and \$9.88 from \$41.50. \$</p> <p>(35) Subtract \$9.87 from the sum of \$41.50 and \$7.75. \$</p> <p>(36) $413-186=$</p> <p>(37) $208+261+366=$</p> <p>(38) $\frac{2}{3}$ is what per cent less than 6%? %.</p> <p>(39) 90% of 6% =</p> <p>(*40) If 500 Indonesian rupiahs equal 43 dollars, how many rupiahs equal 494.5 dollars?</p> <p>(41) $4\frac{19}{20}$ is what per cent more than $4\frac{1}{2}$? %.</p> <p>(42) Write in figures: twenty four and seven-eighths million.</p> <p>(43) Divide seventy two million by eighteen thousand.</p> <p>(44) $(62\times 16)+(31\times 18)=$</p> <p>(45) $(31\times 16)+(62\times 18)=$</p> <p>(46) $(62\times 18)-(31\times 16)=$</p> <p>(47) $(62\times 16)-(31\times 18)=$</p> <p>(48) A man receives a 6% increase in salary and now earns \$795 a month. How much did he earn before the raise? \$</p> <p>(49) A man receives a 5% decrease in salary and now earns \$608 a month. How much did he earn before the cut? \$</p> <p>(*50) $3243\div 69=$</p> <p>(51) At 55 miles an hour, how long will it take to travel 605 miles? hours.</p> |
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- (52) 5% of \$28,600,000 = \$
- (53) How far can one travel in $7\frac{1}{2}$ hours at 58 miles an hour?
..... miles.
- (54) $8 \times 24 =$
- (55) $8 \times 24\frac{1}{2} =$
- (56) $8\frac{1}{2} \times 24 =$
- (57) $8\frac{1}{2} \times 24\frac{1}{2} =$
- (58) $8\frac{1}{4} \times 24 =$
- (59) $8\frac{3}{4} \times 24 =$
- (*60) If a trip which is usually made in $11\frac{1}{2}$ hours is made at a rate 15% slower than usual, how long will the trip take? hrs.
- (61) $8 \times 24\frac{1}{4} =$
- (62) $8 \times 24\frac{3}{4} =$
- (63) $8\frac{1}{4} \times 24\frac{1}{4} =$
- (64) $8\frac{3}{4} \times 24\frac{1}{4} =$
- (65) $8\frac{1}{4} \times 24\frac{3}{4} =$
- (66) Find the seventh term of the sequence $8\frac{3}{4}, 9\frac{1}{2}, 10\frac{1}{4}, 11 \dots$
.....
- (67) Find the tax on 140 million gallons of gasoline at $6\frac{1}{2}\text{¢}$ a gallon.
\$.....
- (68) Find the tax on 65 million gallons of gasoline at 14¢ a gallon.
\$.....
- (69) Find the tax on 280 million gallons of gasoline at $3\frac{1}{4}\text{¢}$ a gallon.
\$.....
- (*70) The tax on 140 million gallons of gasoline is \$8,400,000. Find the tax on one gallon.¢.
- (71) How many integers between 12 and 200 are divisible by 13?.....
.....
- (72) Find the smallest integer greater than 5 that 595 is divisible by.
- (73) A bag contains 7 white balls and 14 black balls. A ball is taken taken at random from the bag. Find the probability that the ball is white.
- (74) Two cents are tossed. What is the probability that both show heads?
- (75) What is the square root of 3.61?
- (76) Given $1426 \div 46 = 31$. Find $1426 \div 11\frac{1}{2}$
- (77) The perimeter of a square is increased from $17\frac{1}{2}$ in. to $18\frac{1}{2}$ in. Find the corresponding increase in the area. sq. in.
- (78) Given $322 \times 34 = 10,948$. Find 322×32
- (79) The hypotenuse of a right triangle is 39 in., and one leg is 36 in. Find the other leg. in.
- (*80) Estimate the circumference of a circle of area 5.12 sq. in.

The University of Texas Interscholastic League

Number Sense Test, Series T-03

Contestant's Number.....

Contestant's Score.....

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Stop—Wait for Signal

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| <p>(1) $57 + 49 =$</p> <p>(2) $58 + 48 - 29 =$</p> <p>(3) $417 + 387 =$</p> <p>(4) $631 = 434 +$</p> <p>(5) $31 \times 11 =$</p> <p>(6) $31\frac{3}{4} - 18\frac{3}{4} =$</p> <p>(7) One half of $53\frac{1}{2} =$</p> <p>(8) $18\frac{7}{8} + 26\frac{3}{8} =$</p> <p>(9) $57 \div 1\frac{1}{2} =$</p> <p>(*10) Estimate the value of 23 acres of land at \$65 an acre. \$</p> <p>(11) Find the average of 57, 49, 58, 48.</p> <p>(12) 372 inches = feet.</p> <p>(13) Subtract \$6.76 from \$11.22. \$</p> <p>(14) Find the area of a triangle of base 31 in. and altitude 22 in. sq. in.</p> <p>(15) 32 feet = inches.</p> <p>(16) Find the interest on \$320 for one year at 1.2%. \$</p> <p>(17) 5% of 452 =</p> <p>(18) Add \$8.69, \$3.49, and \$6.98. \$</p> <p>(19) $11\frac{3}{4} - 9\frac{7}{8} + 2\frac{1}{2} =$</p> <p>(*20) $2091 \div 41 =$</p> <p>(21) 15% of 452 =</p> <p>(22) $7\frac{1}{2}\%$ of 452 =</p> <p>(23) $4\frac{1}{2} \times 28 =$</p> <p>(24) $4\frac{1}{4} \times 28 =$</p> <p>(25) $4\frac{3}{4} \times 28 =$</p> <p>(26) $4\frac{1}{2} \times 28\frac{1}{2} =$</p> <p>(27) $4 \times 28\frac{1}{2} =$</p> <p>(28) $(2\frac{1}{2} \times 28) + (2\frac{1}{4} \times 28) =$</p> <p>(29) $(8 \times 28\frac{1}{2}) - (3\frac{1}{2} \times 28\frac{1}{2}) =$</p> <p>(*30) $142 + 398 + 568 - 189 =$</p> | <p>(31) Write in figures: six and one-eighth million.</p> <p>(32) $12\frac{1}{2} \div 2\frac{1}{2} =$</p> <p>(33) $13\frac{1}{2} \div 4\frac{1}{2} =$</p> <p>(34) $75 \div 1\frac{1}{2} =$</p> <p>(35) $1350 \div 4\frac{1}{2} =$</p> <p>(36) If pillows cost \$6.39 each or three for \$18.18, how much is saved by buying three? \$.</p> <p>(37) If 500 Indonesian rupiahs equal 43 dollars, how many dollars equal 1100 rupiahs?</p> <p>(38) How many rupiahs equal 215 dollars?</p> <p>(39) How many dollars equal 2250 rupiahs?</p> <p>(*40) How many rupiahs equal 200 dollars?</p> <p>(41) $43 \times 2\frac{3}{8} =$</p> <p>(42) Divide one hundred thirty-five thousand by four hundred fifty.</p> <p>(43) If the cost of 7500 egg cartons is \$225, find the cost per thousand. \$</p> <p>(44) Find the cost of 15 gallons of gas at 51¢ a gallon. \$</p> <p>(45) Find the cost of 15 gallons of gas at 53¢ a gallon. \$</p> <p>(46) Find the cost of 18 gallons of gas at 53¢ a gallon. \$</p> <p>(47) $7\frac{1}{4}$ is what per cent more than $6\frac{1}{4}$? %.</p> <p>(48) 6 is what per cent less than $6\frac{1}{4}$? %.</p> <p>(49) 34 is what per cent of 136? %.</p> <p>(*50) Estimate the circumference of a circle of diameter $46\frac{1}{2}$ inches. inches.</p> <p>(51) At 34 miles an hour, how long will it take to travel 272 miles? hours.</p> <p>(52) How far can one travel in $11\frac{1}{2}$ hours at 36 miles an hour? miles.</p> <p>(53) How fast must one travel in order to cover 648 miles in 12 hours? miles per hour.</p> |
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- (54) $414 \div 11\frac{1}{2} =$
- (55) $414 \div 5\frac{3}{4} =$
- (56) $828 \div 11\frac{1}{2} =$
- (57) $828 \div 5\frac{3}{4} =$
- (58) $207 \div 11\frac{1}{2} =$
- (59) $828 \div 23 =$
- (*60) A man borrowed \$1450 and a year later repaid \$1566. At what rate did he pay interest? %.
- (61) Mary has \$333.18 in the bank. She withdraws \$188.90. Find her balance. \$
- (62) A man received a 5% increase in salary and now earns \$378 a month. How much did he earn before the raise? \$
- (63) A man received a 5% decrease in salary and now earns \$285 a month. How much did he earn before the cut? \$
- (64) A man earns \$780 a month and receives a 5% increase in salary. How much does he now earn? \$
- (65) A man earns \$780 a month and receives a 5% decrease in salary. How much does he now earn? \$
- (66) Find the tax on 240 million gallons of gasoline at $5\frac{1}{2}\text{¢}$ a gallon. \$
- (67) The tax on 240 million gallons of gasoline is \$10,800,000. Find the tax on one gallon. ¢.
- (68) $780 \times 1.05 =$
- (69) $10,800,000 \div 240 =$
- (*70) $7\frac{1}{2}\%$ of \$23,200 = \$
- (71) A speed of 60 miles an hour is equivalent to how many feet a second?
- (72) Find the smallest number greater than 4 that 1309 is divisible by.
- (73) Three dimes are tossed. Find the probability that exactly one head will show.
- (74) A bag contains 10 white balls and 15 black balls. A ball is taken at random from the bag. Find the probability that it is black.
- (75) The perimeter of a square is increased from $14\frac{1}{2}$ in. to $18\frac{1}{2}$ in. Find the corresponding increase in the area. sq. in.
- (76) The square root of 784 is
- (77) The area of a square is decreased from 1600 sq. in. to 784 sq. in. Find the corresponding decrease in the perimeter. in.
- (78) $41^2 - 38^2 =$
- (79) The legs of a right triangle are 20 in. and $4\frac{1}{2}$ in. Find the hypotenuse. in.
- (*80) Estimate the area of a circle of circumference $23\frac{3}{4}$ ft. sq. ft.

The University of Texas Interscholastic League

Number Sense Test, Series T-04

Contestant's Number.....

Contestant's Score.....

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Stop—Wait for Signal

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| <p>(1) $29+88=$</p> <p>(2) $93-28=$</p> <p>(3) $28+89+48=$</p> <p>(4) $165-48=$</p> <p>(5) $176\div 16=$</p> <p>(6) $25\times 92=$</p> <p>(7) $50\times 46=$</p> <p>(8) 5% of 46,000=</p> <p>(9) $2\frac{1}{2}\%$ of 92,000=</p> <p>(*10) Estimate the cost of 237 acres of land at \$128 an acre. \$</p> <p>(11) How many ties at \$1.75 each can be bought for \$14.00?</p> <p>(12) $28\div 1\frac{3}{4}=$</p> <p>(13) $75\div 1\frac{1}{4}=$</p> <p>(14) $32\times 1\frac{3}{4}=$</p> <p>(15) $32\times 3\frac{3}{4}=$</p> <p>(16) Subtract \$7.77 from \$12.21. \$</p> <p>(17) Subtract the sum of \$389 and \$388 from \$1221. \$</p> <p>(18) Subtract \$9.66 from the sum of \$8.82 and \$9.46. \$</p> <p>(19) Find the area of a triangle of base $7\frac{1}{2}$ in. and altitude 32 in.
..... sq. in.</p> <p>(*20) $831-669+345+1388-331=$</p> <p>(21) Find the cost of 15 gallons of gas at 44¢ a gallon. \$</p> <p>(22) Find the cost of 15 gallons of gas at 46¢ a gallon. \$</p> <p>(23) Find the cost of 16 gallons of gas at 44¢ a gallon. \$</p> <p>(24) Find the cost of 15 gallons of gas at \$44.8¢ a gallon. \$</p> <p>(25) $54\times 11=$</p> <p>(26) $54\times 11\frac{1}{2}=$</p> <p>(27) $54\times 11\frac{1}{3}=$</p> <p>(28) $54\times 11\% =$</p> <p>(29) $54\times 11\% =$</p> <p>(*30) 78% of \$4163= \$</p> | <p>(31) $(54\times 11\frac{8}{9})-(54\times 11\frac{1}{3})=$</p> <p>(32) 85 is five-eighths of what number?</p> <p>(33) $12\frac{3}{4}$ is what per cent more than $8\frac{1}{2}$? %.</p> <p>(34) $8\frac{1}{2}$ is what per cent less than $12\frac{3}{4}$? %.</p> <p>(35) $8\frac{1}{2}$ is what per cent of $12\frac{3}{4}$? %.</p> <p>(36) $12\times 43=$</p> <p>(37) $516\div 4.3=$</p> <p>(38) If 500 Indonesian rupiahs equal 43 dollars, how many dollars equal 1600 rupiahs?</p> <p>(39) How many rupiahs equal 8.6 dollars?</p> <p>(*40) How many rupiahs equal 387 dollars?</p> <p>(41) If shirts sell for \$3.75 each or four for \$14.40, how much is saved by buying four?¢.</p> <p>(42) If 4500 pegs cost \$10.71, find the cost per thousand. \$</p> <p>(43) $48:80=1\frac{1}{2}: ?$</p> <p>(44) How many thousands in two and a half million?</p> <p>(45) How many millions in sixteen and a fourth billion?</p> <p>(46) Find the average of $26\frac{1}{2}$, $38\frac{1}{4}$, $25\frac{1}{2}$, and $9\frac{3}{4}$.</p> <p>(47) 63 is what per cent of 315? %.</p> <p>(48) Write in figures: nineteen and three-eighths million.</p> <p>(49) Compute the tax on a house valued at \$12,200 if the tax rate is 2.4%. \$</p> <p>(*50) Estimate the radius of a circle of circumference 1000 ft. ft.</p> <p>(51) $43\times 43=$</p> <p>(52) $43\times 42=$</p> <p>(53) $(43\times 43)-(42\times 42)=$</p> <p>(54) $1849\div 43=$</p> <p>(55) At 42 miles an hour, how long will it take to travel 1806 miles?
..... hrs.</p> <p>(56) How far can one travel in 43 hours at 44 miles an hr.? mi.</p> |
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- (57) At what rate must one travel in order to cover 903 miles in 21 hours? miles per hour.
- (58) Subtract \$28.85 from \$55.32. \$
- (59) Bill owes \$341.35 on his car. He makes a payment of \$55.65. How much does he now owe? \$
- (*60) A man borrowed \$2331 and a year later repaid \$2564.10. At what rate did he pay interest? %.
- (61) Find the tax on 260 million gallons of gasoline at $6\frac{1}{2}\text{¢}$ a gallon. \$
- (62) The tax on 240 million gallons of gasoline is \$10,800,000. Find the tax on one gallon. ¢.
- (63) A man earns \$550 a month and receives a 5% increase in salary. How much does he now earn? \$ a month.
- (64) A man receives a 5% increase in salary and now earns \$840 a month. How much did he earn before the raise? \$
- (65) $108,000 \div 240 =$
- (66) $16,900 \div 26 =$
- (67) A man receives a 6% decrease in salary and now earns \$940 a month. How much did he earn before the cut? \$
- (68) $12\frac{1}{2}\%$ of 2496 =
- (69) $62\frac{1}{2}\%$ of 2496 =
- (*70) $56\frac{1}{2}\%$ of 2486 =
- (71) A speed of 240 miles an hour is equivalent to how many feet a second?
- (72) Find the smallest number greater than 4 that 873 is divisible by.
- (73) A shelf contains 15 books by author A and 20 books by author B. A book is taken at random from the shelf. What is the probability that the author is B?
- (74) Three nickels are tossed. What is the probability that at least one head will show?
- (75) The perimeter of a square is increased from 18 in. to 26 in. Find the corresponding increase in the area. sq. in.
- (76) The square root of 729 is
- (77) The area of a square is decreased from 729 sq. in. to 676 sq. in. Find the corresponding decrease in the perimeter. in.
- (78) The hypotenuse of a right triangle is 25 in. and one leg is 7 in. Find the other leg. in.
- (79) $51^2 - 49^2 =$
- (*80) Estimate the area of a circle of circumference 27 in. sq. in.

The University of Texas Interscholastic League

Number Sense Test, Series T-05

Contestant's Number.....

Contestant's Score.....

**Read Directions Carefully
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**Do Not Unfold This Sheet
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Directions: Do not turn this page until the person conducting the 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 star (*) require only approximate 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.

Person conducting contest should explain these directions carefully to the contestants.

Stop—Wait for Signal

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| <p>(1) $66¢ + 88¢ + 35¢ = \\$</p> <p>(2) $88¢ + 35¢ - 66¢ =$</p> <p>(3) $14 \times 16 =$</p> <p>(4) $14\frac{1}{2} \times 16 =$</p> <p>(5) $\\$6.85 + \\$17.85 = \\$</p> <p>(6) $\\$7.85 + \\$16.85 - \\$9.89 = \\$</p> <p>(7) $232 \div 14\frac{1}{2} =$</p> <p>(8) 5% of 664 =</p> <p>(9) $(15 \times 15) - (16 \times 14) =$</p> <p>(*10) Estimate the value of 237 acres of land at \$128 an acre. \$</p> <p>(11) Find the area of rectangle of base 14 in. and altitude $16\frac{1}{2}$ in.
..... sq. in.</p> <p>(12) Find the base of a triangle of area 231 sq. in. and altitude $16\frac{1}{2}$ in.
..... in.</p> <p>(13) $11\frac{1}{4}\%$ of 480 =</p> <p>(14) $11\frac{1}{4}\%$ of 240 =</p> <p>(15) $22\frac{1}{2}\%$ of 480 =</p> <p>(16) $16\% - 8\% + 5\frac{1}{4}\% =$</p> <p>(17) $475 \div 12\frac{1}{2} =$</p> <p>(18) $\frac{3}{8}$ is what per cent of $3\frac{1}{8}$?</p> <p>(19) 17 is what per cent more than $12\frac{3}{4}$?</p> <p>(*20) $4158 \div 77 =$</p> <p>(21) If 6500 pegs cost \$22.75, find the cost of 1300 pegs. \$</p> <p>(22) If 6500 pegs cost \$7.93, find the cost per thousand. \$</p> <p>(23) Find the cost of 15 dozen eggs at 62¢ a dozen. \$</p> <p>(24) Find the cost of 15 dozen eggs at 64¢ a dozen. \$</p> <p>(25) Find the cost of 17 dozen eggs at 62¢ a dozen. \$</p> <p>(26) Find the cost of 15 dozen eggs at 62.4¢ a dozen. \$</p> <p>(27) Find the cost of 15 dozen eggs at 63.6¢ a dozen. \$</p> <p>(28) If 500 Indonesian rupiahs equal 43 dollars, how many dollars equal 4250 rupiahs?</p> | <p>(29) How many rupiahs equal 344 dollars?</p> <p>(*30) How many dollars equal 2860.47 rupiahs?</p> <p>(31) $561 \div 51 =$</p> <p>(32) $1122 \div 51 =$</p> <p>(33) $561 \div 25\frac{1}{2} =$</p> <p>(34) $612 \div 51 =$</p> <p>(35) 1122 billion divided by $25\frac{1}{2}$ million =</p> <p>(36) Write in figures: seven-eighths billion.</p> <p>(37) $70 \div 2\frac{1}{2} =$</p> <p>(38) $28 \div 3\frac{1}{2} =$</p> <p>(39) $31\frac{1}{2} \div 3\frac{1}{2} =$</p> <p>(*40) A rocket moves 16,500 miles an hour. How many feet does it move in a second?</p> <p>(41) $\\$53.85 - \\$36.88 = \\$</p> <p>(42) Subtract the sum of \$17.71 and \$19.14 from \$53.82. \$</p> <p>(43) If 100 lire are worth 16¢, find the worth of \$24. lire.</p> <p>(44) Triangle A has a base of 32 in. and an altitude of 25 in. Triangle B has a base of 36 in. and altitude of 25 in. The area of triangle B is what per cent greater than that of A?</p> <p>(45) The area of A is what per cent less than that of B?</p> <p>(46) The number halfway between 69 and 379 is</p> <p>(47) A is 5% heavier than B, and B is 10% heavier than C. What per cent heavier is A than C?</p> <p>(48) What per cent lighter is C than B?</p> <p>(49) $180 \div 3\frac{1}{3} =$</p> <p>(*50) $5103 \div 63 =$</p> <p>(51) A box of 16 filet mignon steaks each weighing six ounces costs \$33. Find the cost per pound. \$</p> <p>(52) $544 \div 5\frac{1}{3} =$</p> <p>(53) $533\frac{1}{3} \div 5\frac{1}{3} =$</p> <p>(54) $272 \div 5\frac{1}{3} =$</p> |
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- (55) $544 \div 2\% =$
- (56) A man smokes 5 cigars a day of a brand that costs 50¢ for 3. Find his cost of smoking for a year. (360 days). \$
- (57) The smaller of two numbers whose sum is 40 is 60% of the larger. Find the smaller number.
- (58) $(7\frac{3}{8} \times 15\frac{1}{2}) + (2\frac{5}{8} \times 15\frac{1}{2}) =$
- (59) $(7\frac{3}{8} \times 15\frac{1}{2}) - (15\frac{1}{2} \times 2\frac{5}{8}) =$
- (*60) $7147 - 629 - 288 - 48 - 191 =$
- (61) $407 \div 37 =$
- (62) $4070 \div 37 =$
- (63) $2035 \div 37 =$
- (64) $814 \div 74 =$
- (65) $203,500 \div 37 =$
- (66) $8140 \div 7.4 =$
- (67) Find the tax on 18 million gallons of gas at $11\frac{1}{2}\text{¢}$ a gallon. \$
- (68) $\frac{7}{8}$ of a mile = feet.
- (69) If 6500 pegs cost \$11.57, find the cost per thousand. \$
- (*70) A rectangular lot measures $\frac{1}{16}$ of a mile by $\frac{3}{8}$ of a mile. How many square feet does it contain? sq. ft.
- (71) Three dimes are tossed. What is the probability that two tails and one head will show?
- (72) Find the smallest number greater than 3 that 3087 is divisible by.
- (73) The perimeter of a square is increased from 29 in. to 33 in. Find the corresponding increase in the area. sq. in.
- (74) The area of a square is decreased from 961 sq. in. to 841 sq. in. Find the corresponding decrease in the perimeter. sq. in.
- (75) A bag contains 21 red balls, 17 black balls, and 13 white balls. A ball is taken at random from the bag. Find the probability that the ball is black.
- (76) A rectangle is 24 in. long and 18 in. wide. Find the length of the diagonal. in.
- (77) $86^2 =$
- (78) $18^3 - 17^3 =$
- (79) $7^3 + 3^3 =$
- (*80) Estimate the circumference of a circle of area 324 sq. in. in.

The University of Texas Interscholastic League

Number Sense Test, Series T-06

Contestant's Number.....

Contestant's Score.....

**Read Directions Carefully
Before Beginning Test**

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Directions: Do not turn this page until the person conducting the 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 star (*) require only approximate 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.

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Stop—Wait for Signal

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| <p>(1) $65¢ + 76¢ + 47¢ = \\$</p> <p>(2) $841 - 588 =$</p> <p>(3) $86¢ + 83¢ - 77¢ =$ ¢.</p> <p>(4) $18 \times 17 =$</p> <p>(5) $253 \div 23 =$</p> <p>(6) $841 - 585 - 56 =$</p> <p>(7) $\\$14.62 + \\$9.89 = \\$</p> <p>(8) $18 \times 17\frac{1}{2} =$</p> <p>(9) $169 \div 6\frac{1}{2} =$</p> <p>(*10) Estimate the value of 835 acres of land at \$68.50 an acre.
\$</p> <p>(11) $24\frac{1}{2}\%$ of \$800 = \$</p> <p>(12) $\frac{5}{8}$ is what per cent of 5? %.</p> <p>(13) $\frac{5}{8}$ is what per cent less than 5? %.</p> <p>(14) $22\frac{1}{2}$ is what per cent less than 24? %.</p> <p>(15) Find the base of a rectangle of area 315 sq. ft. and altitude $17\frac{1}{2}$ ft. ft.</p> <p>(16) $775 \div 6\frac{1}{4} =$</p> <p>(17) 16% of \$750 = \$</p> <p>(18) One-half of $215\frac{3}{4} =$</p> <p>(19) One-third of $215\frac{3}{4} =$</p> <p>(*20) $885 + 1328 + 1259 - 492 - 388 =$</p> <p>(21) Find the altitude of a triangle of area 315 sq. ft. and base $17\frac{1}{2}$ ft. ft.</p> <p>(22) $\frac{1}{2}$ of $45\frac{1}{2} =$</p> <p>(23) $\frac{1}{4}$ of $45\frac{1}{2} =$</p> <p>(24) $\frac{3}{4}$ of $45\frac{1}{2} =$</p> <p>(25) $\frac{5}{8}$ of $45\frac{1}{2} =$</p> <p>(26) $2\frac{1}{2}$ of $45\frac{1}{2} =$</p> <p>(27) $1\frac{1}{4}$ of $45\frac{1}{2} =$</p> <p>(28) $1\frac{3}{8}$ of $45\frac{1}{2} =$</p> | <p>(29) $45\frac{1}{2} \div 11\frac{3}{8} =$</p> <p>(*30) If 500 Indonesian rupiahs equal 43 dollars, how many rupiahs equal 498.8 dollars?</p> <p>(31) $91 \div 11\frac{3}{8} =$</p> <p>(32) $182 \div 22\frac{3}{4} =$</p> <p>(33) $182 \div 11\frac{3}{8} =$</p> <p>(34) $91 \div 22\frac{3}{4} =$</p> <p>(35) $136\frac{1}{2} \div 11\frac{3}{8} =$</p> <p>(36) $11\frac{3}{8} \times 16 =$</p> <p>(37) $37\frac{1}{2}\%$ of $45\frac{1}{2} =$</p> <p>(38) $12 \times 11\frac{3}{8} =$</p> <p>(39) 376 billion divided by 47 million =</p> <p>(*40) A rocket moves 5715 miles an hour. How many feet does it move in a second? feet.</p> <p>(41) $66^2 - 64^2 =$</p> <p>(42) $8^3 - 7^3 =$</p> <p>(43) $\\$150.00 - \\$78.41 = \\$</p> <p>(44) $(18 \times 33) + (11 \times 36) =$</p> <p>(45) Find the number halfway between 173 and 481.</p> <p>(46) If 100 Italian lire are worth 16¢, find the worth of 2425 lire.
\$</p> <p>(47) A is 10% lighter than B, and B is 15% lighter than C. What per cent lighter is A than C? %.</p> <p>(48) What per cent heavier is B than A? %.</p> <p>(49) Subtract the sum of \$8.78 and \$13.45 from \$25.21. \$</p> <p>(*50) Estimate the volume of a sphere of diameter 6 in. cu. in.</p> <p>(51) $1740 \div 7\frac{1}{2} =$</p> <p>(52) $1740 \div 3\frac{3}{4} =$</p> <p>(53) $(7\frac{1}{2} \times 232) + (3\frac{3}{4} \times 464) =$</p> <p>(54) $41^2 - 40^2 - 8^2 =$</p> <p>(55) $194 \div 24\frac{1}{4} =$</p> |
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- (56) $210 \div 8\frac{3}{4} =$
- (57) $776 \div 97 =$
- (58) $840 \div 35 =$
- (59) Find the cost of driving a car 24,000 miles at $3\frac{1}{2}\text{¢}$ a mile. \$.....
- (*60) The circumference of a circle is decreased from 88 in. to 63 in.
Estimate the corresponding decrease in radius. in.
- (61) If 17,500 bricks cost \$4375, find the cost per thousand. \$.....
- (62) $31\frac{1}{2}$ is what per cent of 45? %.
- (63) Five-elevenths of a yard = in.
- (64) Five-elevenths of a mile = yards.
- (65) 11,440 yards = miles.
- (66) Find the tax on sixteen million gallons of gas at $11\frac{3}{8}\text{¢}$ a gallon.
\$.....
- (67) $204 \div 8\frac{1}{2} =$
- (68) $198 \div 8\frac{1}{4} =$
- (69) $8\frac{3}{4} \times 24\frac{3}{4} =$
- (*70) Estimate the square root of $506\frac{1}{4}$
- (71) Four dimes are tossed. Find the probability that exactly one head will show.
- (72) Find the smallest number greater than 7 that 1573 is divisible by.
- (73) The area of a square is increased from 529 sq. in. to 676 sq. in. Find the increase in perimeter. in.
- (74) A bag contains 34 white balls, 19 red balls, and 23 black balls. A ball is taken at random from the bag. Find the probability that the ball is red.
- (75) The perimeter of a square is decreased from 63 in. to 55 in. Find the corresponding decrease in the area. sq. in.
- (76) The legs of a right angle are $2\frac{1}{2}$ in. and 6 in. Find the hypotenuse. in.
- (77) $21^3 - 20^3 =$
- (78) $8^4 - 7^4 =$
- (79) $3^6 =$
- (*80) Estimate the interest on \$1000 for 12 years at $4\frac{1}{4}\%$ compounded annually. \$.....

The University of Texas Interscholastic League

Number Sense Test, Series T-07

Contestant's Number.....

Contestant's Score.....

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Stop—Wait for Signal

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| <p>(1) $161 - 66 + 45 =$</p> <p>(2) $722 - 568 =$</p> <p>(3) $15 \times 23 =$</p> <p>(4) $324 \div 18 =$</p> <p>(5) $325 \div 3\frac{1}{8} =$</p> <p>(6) $324 \times 1\frac{3}{4} =$</p> <p>(7) $3\frac{1}{8} \times 10\% =$</p> <p>(8) $\frac{3}{4} + \frac{1}{8} + 11/20 =$</p> <p>(9) $732 - 578 + 146 =$</p> <p>(*10) Estimate the number of pints of alcohol that should be added to 46 pints of water in order that the resulting mixture be 8% alcohol.</p> <p>(11) Eight boneless sirloin strip steaks each weighing 14 ounces sell for \$29.96. Find the price per pound. \$.....</p> <p>(12) Find the altitude of a triangle of area 276 sq. in. and base 23 in. in.</p> <p>(13) Find the eighth term of the sequence 81, 27, 9, 3, 1,</p> <p>(14) Find the cost of 15 dozen eggs at 72¢ a dozen. \$.....</p> <p>(15) Find the cost of 15 dozen eggs at 73.6¢ a dozen. \$.....</p> <p>(16) Find the cost of $17\frac{1}{2}$ dozen eggs at 72¢ a dozen. \$.....</p> <p>(17) Find the cost of 35 dozen eggs at 71¢ a dozen. \$.....</p> <p>(18) John has \$742.35 on deposit in a bank. He writes checks for \$65.32 and \$79.68. What is his balance? \$.....</p> <p>(19) How far can one travel in 7 hours 40 minutes at 57 miles an hour? miles.</p> <p>(*20) Estimate the time required for a rocket traveling 8000 feet a second to cover 220,000 miles. hours.</p> <p>(21) $\frac{1}{2}$ of $61\frac{1}{2} =$</p> <p>(22) $\frac{1}{4}$ of $61\frac{1}{2} =$</p> <p>(23) $\frac{3}{4}$ of $61\frac{1}{2} =$</p> <p>(24) $2\frac{1}{2}$ of $61\frac{1}{2} =$</p> | <p>(25) $1\frac{1}{4}$ of $61\frac{1}{2} =$</p> <p>(26) $\frac{3}{8}$ of $61\frac{1}{2} =$</p> <p>(27) $1\frac{3}{8}$ of $61\frac{1}{2} =$</p> <p>(28) $61\frac{1}{2} \div 15\frac{3}{8} =$</p> <p>(29) $123 \div 15\frac{3}{8} =$</p> <p>(*30) Estimate the circumference of a circle of area 441 sq. in. in.</p> <p>(31) Find the tax on 15,375,000 gallons of gasoline at 8¢ a gallon. \$.....</p> <p>(32) Find the interest on \$8400 for one year at $4\frac{1}{4}\%$. \$.....</p> <p>(33) $123 \div 30\frac{3}{4} =$</p> <p>(34) John has \$611 on deposit in a bank. He writes checks for \$85.45 and \$94.88. What is his balance? \$.....</p> <p>(35) A man earning \$452 a month receives a 5% increase in salary. How much does he now earn? \$.....</p> <p>(36) A man earning \$452 a month receives a $7\frac{1}{2}\%$ decrease in salary. How much does he now earn? \$.....</p> <p>(37) A man's salary is raised from \$450 a month to \$463.50 a month. What per cent increase does he receive?%.</p> <p>(38) Write in figures: four and three-sixteenths billion.</p> <p>(39) Find the number halfway between 649 and 1477.</p> <p>(*40) A speed of 6165 miles an hour is equivalent to how many feet a second?</p> <p>(41) If 5500 pegs cost \$25.08, find the cost per thousand. \$.....</p> <p>(42) If pegs cost \$5.88 a thousand, find the cost of 6500. \$.....</p> <p>(43) 51 is what per cent more than $42\frac{1}{2}$?%.</p> <p>(44) 34 is what per cent less than $42\frac{1}{2}$?%.</p> <p>(45) Find the perimeter of a quadrilateral of sides 46.3 in., 55 in., 84 in., and 53.7 in. in.</p> <p>(46) If 100 Italian lire are worth 16¢, find the value of 7500 lire. \$.....</p> |
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- (47) Convert \$7.20 into lire. lire.
- (48) Convert 8500 Mexican pesos into dollars at $12\frac{1}{2}$ pesos to the dollar. \$.....
- (49) 39 is what per cent of 65?%.
- (*50) Estimate the volume of a sphere of diameter 12 in. cu. in.
- (51) $10 \div 3\frac{3}{8} =$
- (52) $3\frac{1}{8} \times 3\frac{3}{8} =$
- (53) $3/5 + \frac{1}{8} + 1/40 =$
- (54) $12 \times 15\% =$
- (55) $15\% \times 24 =$
- (56) $184\frac{1}{2} \div 15\% =$
- (57) $(18\frac{3}{4} \times 41\frac{1}{8}) + (11\frac{1}{4} \times 41\frac{1}{8}) =$
- (58) $(18\frac{3}{4} \times 41) - (41 \times 11\frac{1}{4}) =$
- (59) If 500 Indonesian rupiahs equal 43 dollars, how many dollars equal 48,000 rupiahs?
- (*60) How many rupiahs equal 2494 dollars?
- (61) A speed of 3300 feet a second is equivalent to miles an hr.
- (62) One square yard = square inches.
- (63) One cubic foot = cubic inches.
- (64) Five-elevenths of a mile = feet.
- (65) Six-elevenths of a mile = yards.
- (66) One cubic yard = cubic feet.
- (67) 162 cubic feet = cubic yards.
- (68) If a mile is equal to 1.61 kilometers, convert a speed of 60 miles an hour to its equivalent in kilometers per hour.
- (69) Convert a speed of 483 kilometers per hour to its equivalent in miles per hour.
- (*70) If a trip which is usually made in 13 hours is made at a speed 35% slower than usual, how long will the trip take? hrs.
- (71) Find the largest integer less than 100 that 539 is divisible by.
- (72) Four coins are tossed. Find the probability that exactly three heads will show.
- (73) A card is selected at random from a deck of 52 cards. Find the probability that the card is not a face card.
- (74) The legs of a right triangle are $7\frac{1}{2}$ in. and 10 in. Find the hypotenuse. in.
- (75) A bag contains 6 white balls and 6 black balls. Two balls are taken at random from the bag. Find the probability that one is white and one is black.
- (76) The perimeter of a square is increased from 78 in. to 86 in. Find the corresponding increase in the area. sq. in.
- (77) The area of a square is decreased from 1089 sq. in. to 784 sq. in. Find the corresponding decrease in perimeter. in.
- (78) $68^2 - 63^2 =$
- (79) $53^3 - 25^3 =$
- (*80) The circumference of a circle increases from 18 in. to 23 in. Estimate the corresponding increase in the area. sq. in.

The University of Texas Interscholastic League

Number Sense Test, Series T-08

Contestant's Number.....

Contestant's Score.....

**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 the 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 star (*) require only approximate 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.

Person conducting contest should explain these directions carefully to the contestants.

Stop—Wait for Signal

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| <p>(1) $888 + 788 - 979 =$</p> <p>(2) $1141 - 655 - 278 =$</p> <p>(3) $41 \times 42 =$</p> <p>(4) $1120 \div 35 =$</p> <p>(5) $75 \times 376 =$</p> <p>(6) $1690 \div 6\frac{1}{2} =$</p> <p>(7) $1120 \div 17\frac{1}{2} =$</p> <p>(8) $\\$26.47 - \\$18.78 = \\$</p> <p>(9) $1722 \div 42 =$</p> <p>(*10) Estimate the value of 243 acres of land at \$128 an acre. \$.....</p> <p>(11) Find the altitude of a triangle of area 495 sq. in. and base $22\frac{1}{2}$ in. in.</p> <p>(12) 57 is what per cent of 95? %.</p> <p>(13) 78 is what per cent more than 65? %</p> <p>(14) $26 \times 18 =$</p> <p>(15) $26 \times 18\frac{1}{2} =$</p> <p>(16) $26\frac{1}{2} \times 18 =$</p> <p>(17) $26\frac{3}{8} \times 18 =$</p> <p>(18) $26\frac{3}{8} \times 18\frac{1}{2} =$</p> <p>(19) $477 \div 26\frac{1}{2} =$</p> <p>(*20) Estimate the volume of a sphere of diameter 8 in. cu. in.</p> <p>(21) Find the cost of $22\frac{1}{2}$ gallons of gas at 44¢ a gallon. \$.....</p> <p>(22) Find the cost of 22 gallons of gas at $44\frac{1}{2}$¢ a gallon. \$.....</p> <p>(23) Find the cost of $22\frac{1}{2}$ gallons of gas at 46¢ a gallon. \$.....</p> <p>(24) Find the cost of $22\frac{1}{2}$ gallons of gas at 44.8¢ a gallon. \$.....</p> <p>(25) Add \$18.85, \$16.75, and \$38.68. \$.....</p> <p>(26) Subtract \$88.54 from \$111.12. \$.....</p> <p>(27) Subtract the sum of \$18.85 and \$38.68 from \$74.09. \$.....</p> <p>(28) $392 \div 49 =$</p> <p>(29) $351 \div 39 =$</p> <p>(*30) Estimate the circumference of a circle of area 2601 sq. in. in.</p> | <p>(31) Find the tax on $44\frac{1}{2}$ million gallons of gasoline at 22¢ a gallon. \$.....</p> <p>(32) Write in figures: eighteen and eleven-sixteenths billion.</p> <p>(33) Divide eighteen and three-fourths billion by sixty-two million five hundred thousand.</p> <p>(34) Find the number halfway between $40\frac{3}{4}$ and $213\frac{1}{4}$.</p> <p>(35) Find the sixth term of the sequence, 2.7, 6.1, 9.5, 12.9,</p> <p>(36) $46 \times 8\frac{1}{2} =$</p> <p>(37) A man earning \$637 a month receives a 5% increase in salary. How much does he now earn? \$.....</p> <p>(38) A man's salary is reduced from \$640 a month to \$608 a month. What per cent reduction does he receive? \$.....</p> <p>(39) If the tax on forty-six million gallons of gas is \$3,910,000, what is the tax on one gallon?¢.</p> <p>(*40) A rocket moves 10,320 miles an hour. How many feet does it move in a second?</p> <p>(41) $\frac{1}{2}$ of $53\frac{1}{2} =$</p> <p>(42) $\frac{1}{4}$ of $53\frac{1}{2} =$</p> <p>(43) $\frac{3}{4}$ of $53\frac{1}{2} =$</p> <p>(44) $\frac{5}{8}$ of $53\frac{1}{2} =$</p> <p>(45) $2\frac{1}{2} \times 53\frac{1}{2} =$</p> <p>(46) $1\frac{1}{4} \times 53\frac{1}{2} =$</p> <p>(47) $1\frac{3}{8} \times 53\frac{1}{2} =$</p> <p>(48) $53\frac{1}{2} \div 13\frac{3}{8} =$</p> <p>(49) $160\frac{1}{2} \div 13\frac{3}{8} =$</p> <p>(*50) Estimate the volume of a right circular cylinder of altitude 35 ft. and diameter of base 20 ft. cu. ft.</p> <p>(51) Convert 8875 Italian lire to the equivalent value in dollars, assuming that 100 lire are worth 16¢. \$.....</p> |
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- (52) If 8750 pegs cost \$32.20, find the cost per thousand. \$.....
- (53) 26 is what per cent of 65?%
- (54) 91 is what per cent more than 65?%.
- (55) The sides of a triangle are 9 in., 12 in. and 15 in. in length. Find the area.sq. in.
- (56) The area of a triangle is 676 sq. in. The base is one-half the altitude. Find the base.in.
- (57) If 500 Indonesian rupiahs equal 43 dollars, how many dollars equal 42,500 rupiahs?
- (58) How many rupiahs equal 301 dollars?
- (59) $848 - 569 + 988 - 759 =$
- (*60) Estimate the time required for a rocket to travel 270,000 miles at 3960 feet per second.hours.
- (61) Seven-elevenths of a mile =yds.
- (62) 18 is to 126 as 15 is to
- (63) Find the average of 18, 21, 24, 27, 30, 33, 36, 39.
- (64) $40\frac{1}{2}$ is what per cent of 90?%.
- (65) 5500 feet a second = miles an hour.
- (66) $(32 \times 81) - (27 \times 64) =$
- (67) $107 \div 13\% =$
- (68) $13\frac{3}{8} \times 16 =$
- (69) $18\frac{5}{8} - 9\frac{3}{4} + 29\frac{7}{8} - 37\frac{3}{4} =$
- (*70) Estimate the speed required for a rocket to travel 63,750 miles in 25 hours.feet per second.
- (71) Five coins are tossed. What is the probability that five heads or five tails will show?
- (72) Find the smallest number greater than 4 that 1496 is divisible by.
- (73) A bag contains 5 white balls, 5 red balls, and 5 black balls. Two balls are taken at random from the bag. Find the probability that one is white and one is red.
- (74) Two cards are selected at random from a 52 card deck. Find the probability that both are spades.
- (75) $86^2 - 82^2 =$
- (76) The perimeter of a square is increased from 95 in. to 103 in. Find the corresponding increase in the area.sq. in.
- (77) The hypotenuse of a right triangle is .39 in. and one leg is .15 in. Find the other leg.in.
- (78) $24^2 + 28^2 - 26^2 =$
- (79) $63^3 - 62^3 =$
- (*80) Estimate the cube root of 59,319.