
Do NOT unfold this paper until
the Contest Director
gives you permission to do so!

THE UNIVERSITY INTERSCHOLASTIC LEAGUE

Slide Rule Contest

Number S 17

(Special—Not for official contests)

Conference:

Contestant's Serial Number:

Date of Contest:

Location of Contest:

Contestant's Net Score:.....

1. $8.82 \times 0.376 \times 4.14$ ----- equals _____
2. $27.4 \times 6.41 \times 0.843$ ----- equals _____
3. $0.0617 \times 238 \times 5.06$ ----- equals _____
4. $40.9 \times 19.6 \times 0.372 \times 0.761$ ----- equals _____
5. $\frac{32.8 \times 0.226}{5.26 \times 375}$ ----- equals _____
6. $\frac{0.00392}{1.48 \times 6.27}$ ----- equals _____
7. $\frac{77.2 \times 16.8}{0.212}$ ----- equals _____
8. $\frac{37.6}{1.25 \times 0.114 \times 6.21}$ ----- equals _____
9. $\frac{774 \times 0.219 \times 0.0576}{2.08 \times 0.994}$ ----- equals _____
10. $\frac{2.18 \times 5280 \times 3.65}{0.0927 \times 77.6 \times 15.4}$ ----- equals _____
11. $\frac{0.276 \times 40.3 \times 64.9}{13.8 \times 19.6 \times 0.118 \times 5.25}$ ----- equals _____
12. $\frac{33.3 \times 0.403 \times 2.61 \times 3.28}{0.00816 \times 3040 \times 11.7}$ ----- equals _____
13. $\frac{2.81 \times 19.3 \times 503 \times 0.225}{771 \times 16.4 \times 0.307 \times 1.21}$ ----- equals _____
14. $\frac{1.22 \times 31.6 \times 2.58 \times 7.13}{0.00454 \times 3260 \times 0.0917}$ ----- equals _____

15. $\frac{\sqrt{22.8} \times 0.0448 \times 0.928}{0.296 \times 0.377 \times 14.6}$ ----- equals _____
16. $\frac{0.792 \times \sqrt{6.07} \times 0.0865}{\sqrt{281} \times 0.904 \times 0.00673}$ ----- equals _____
17. $\frac{2.11 \times (3.45)^2 \times 0.0373}{\sqrt{15.6} \times 0.529 \times 0.803}$ ----- equals _____
18. $\sqrt{2730} \times 1.46 \times (71.5)^2 \times 0.0266$ ----- equals _____
19. $\frac{9.14 \times 0.666 \times 13.2 \times 0.0723}{(1.54)^2 \times 0.396 \times \sqrt{351}}$ ----- equals _____
20. $(0.000336)^2 \times 1.62 \times \sqrt{708,000}$ ----- equals _____
21. $\frac{\sqrt{0.00526} \times 0.392 \times (16,800)^2}{4.05 \times 0.0397 \times 1.21 \times 2.63}$ ----- equals _____
22. $\sqrt{12,700} \times 0.663 \times (0.0398)^2 \times 2.78$ ----- equals _____
23. $\frac{19.2 \times 33,500 \times (0.0121)^2 \times 1.77}{0.886 \times 365 \times 2.54 \times \sqrt{0.737}}$ ----- equals _____
24. $\frac{(9.21 \times 0.665)^2 \times 0.308 \times 12.2}{14.7 \times \sqrt{0.217} \times 9.33 \times 0.667}$ ----- equals _____
25. $\frac{(7.24)^3 \times 0.0336 \times 0.147}{\sqrt{26.4} \times 8.06 \times 322 \times 616}$ ----- equals _____
26. $\frac{19.6 \times (0.276 \times 0.883)^2}{1.44 \times 2.37 \times 0.114 \times 3.24}$ ----- equals _____
27. $\frac{\sqrt{3.69 \times 2040} \times 0.000772}{1.68 \times (0.0443)^3 \times 28.8}$ ----- equals _____

$$28. \frac{\sqrt[3]{5.32} \times 0.00826 \times \sqrt{47,300}}{0.0229 \times 0.992 \times 2.66 \times 8.89} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$29. \frac{14.8 \times 7.25 \times \sqrt{808} \times 3.65}{(25.4 \times 0.776)^3 \times 0.00826} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$30. \sqrt{\frac{0.855}{0.00309}} \times \frac{0.0278 \times 9.21}{\sqrt[3]{0.333 \times 2.68}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$31. \sqrt[3]{79,200 \times 0.443} \times (216 \times 314)^2 \text{ ----- equals } \underline{\hspace{2cm}}$$

$$32. \sqrt{\frac{6.11 \times 30.2}{0.0497 \times 708}} \times \frac{(2.55 \times 8.04)^2}{1.92 \times 0.0446} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$33. \frac{\sqrt{31.5 \times 4.06 \times 0.826 \times 2.35}}{\sqrt[3]{2.67} \times 0.00438 \times 767,000} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$34. \left[\frac{0.929 \times 3.75}{14.6 \times 0.773} \right]^2 \times \frac{497 \times 0.667}{\sqrt{0.543 \times 587}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$35. \sqrt{\frac{7.66 \times 1.25}{492 \times 0.00329}} \times \left[\frac{62,400 \times 1.22}{826 \times 72.4} \right]^2 \text{ ----- equals } \underline{\hspace{2cm}}$$

$$36. \frac{\pi \times \sqrt{2.88} \times 0.0423 \times \sqrt[3]{0.927}}{8.24 \times 0.191 \times 0.204 \times 1.75} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$37. \left[\frac{1.79 \times 3070}{0.426 \times 2.89} \right]^2 \times \left[\frac{281 \times 479}{323 \times 613} \right]^3 \text{ ----- equals } \underline{\hspace{2cm}}$$

$$38. \frac{\sqrt[3]{3.22 \times 0.00428} \times \pi^2 \times 61.4}{760 \times 0.339 \times (2.65 \times 8.02)^2} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$39. \sqrt[3]{\frac{37,200,000}{42.7 \times 891 \times 95}} \times \frac{\pi^3 \times 72.1}{(42 \times 303)^2} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$40. \left[\frac{0.000776}{863 \times \pi} \right]^2 \times \frac{\sqrt{\pi} \times 62 \times 99}{0.392 \times 0.047} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$41. \sqrt{\sqrt{0.0707 \times 36.2 \times 61.7 \times (0.292)^3}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$42. \frac{(\pi^3 \times 0.916)^2 \times 864 \times 707}{416,000,000 \times \sqrt[3]{0.026 \times 49}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$43. \frac{\sqrt[3]{\pi} \times \sqrt{27.2 \times 1.09 \times 0.0662}}{9.27 \times 0.126 \times 0.804 \times 13.6} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$44. \frac{\sqrt{9.29 \times 0.663 \times \pi^3 \times 0.000474}}{13,200 \times (0.0225 \times 0.292)^2} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$45. \sqrt{\frac{727}{36,400}} \times \left[\frac{0.504}{0.729} \right]^3 \times \left[\frac{0.0276}{12 \times 33} \right]^2 \text{ ----- equals } \underline{\hspace{2cm}}$$

$$46. \left[\frac{0.443 \times 0.96}{0.716 \times 6.16} \right]^2 \times \frac{82,300,000}{(120 \times 31.4)^3} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$47. \frac{7.66 \times \sqrt{40.5 \times \sqrt{619 \times 0.115}}}{36 \times 0.29 \times 0.00427 \times 1760} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$48. \frac{0.25 \times \pi \times \sqrt[3]{3.6 \times \pi^2}}{19.7 \times 0.00213 \times 360 \times 14.1} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$49. \sqrt{\frac{0.226}{0.00519}} \times \frac{\sqrt[3]{0.22 \times 0.317 \times 12}}{0.00765 \times 13.1 \times 1.72} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$50. \frac{\left[(24 \times 17 \times 62)^2 \right]^2 \times 0.0000193}{0.616 \times 30.2 \times 360 \times \pi \times 24} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$51. \frac{99.2 \times \sqrt{3.15 \times 17} \times 625,000}{\pi^3 \times (1.77 \times 34.6)^2 \times 0.989} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$52. \left[\frac{2.16 \times 0.335}{41.7 \times 0.191} \right]^2 \times \frac{\sqrt{52.6 \times \sqrt{19}}}{0.0707 \times 0.838} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$53. \frac{\sqrt{0.992 \times 707 \times 0.866 \times \pi^3}}{3.88 \times 40.6 \times (0.125 \times 0.13)^2} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$54. \sqrt{\frac{0.692}{(0.115)^3}} \times \left[\frac{0.718}{0.444} \right]^2 \times \frac{1.6 \times 72}{10. \times 2.5} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$55. \frac{19.6 \times 0.000000724}{0.115 \times 12 \times 0.296} \times \left[\frac{8730}{0.009} \right]^2 \text{ ----- equals } \underline{\hspace{2cm}}$$

$$56. \frac{0.329 \times (86.7 \times 12 \times 38.4)^3}{(\pi^2 \times 62.4)^2 \times 3.75 \times 0.625} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$57. \frac{\sqrt{\frac{0.82 \times 3.46}{0.0376 \times 1.55}}}{(15.2 \times 0.0119)^2} \quad \frac{\sqrt[3]{1.75 \times 3.4}}{0.0000826} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$58. \frac{\sqrt[3]{(3.82 \times 9640)^2} \times \sqrt{\sqrt{1.78 \times 46}}}{19.2 \times 36 \times 4.89 \times 71.2 \times 104} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$59. \frac{382 \times 916 \times 404 \times (0.77 \times 15.2)^3}{\frac{\pi}{8} \times 9.22 \times \left[\frac{0.45 \times 36,200,000}{71.5 \times 3.66 \times 12} \right]^2} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$60. \sqrt{\frac{\sqrt{\frac{3.66 \times 80.7}{0.296 \times 3.09}}}{0.0764 \times 0.212}} \times \frac{0.35 \times \pi^2 \times 16}{\left[(19.1 \times 0.114)^2 \right]^2} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$61. \frac{\left[\frac{3.44}{7.76}\right]^2}{2.99} \times \left[\frac{\sqrt{\pi}}{72}\right]^3 \times \frac{\sqrt{\frac{15 \times 1.9}{1.66 \times 3.2}}}{0.0000529} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$62. \frac{\sqrt{\sqrt{4.22 \times 0.00000861} \times 794 \times 12}}{\left[(0.492 \times 6.17)^2 \times (2.77 \times 1.05)^3\right]^2} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$63. \frac{\sqrt{(0.00366 \times 2.75)^3} \times \sqrt[3]{\pi} \times 0.055}{\left[\frac{0.00000398}{0.27 \times 0.15}\right]^2 \times \frac{7260 \times 81.4}{0.116 \times 0.17}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$64. \frac{\sqrt{\frac{92,600,000}{0.000000392}}}{24 \times 71 \times 36.1} \times \frac{\sqrt[3]{\frac{0.00000028}{38,200,000}}}{4.1 \times 39 \times 13} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$65. \frac{\left[\frac{7.88 \times 3.05}{3.66 \times 9.24}\right]^2 \times \frac{\pi}{3} \times \sqrt[3]{\frac{1.22}{0.0317}}}{\frac{19.6 \times 0.0027}{3.26 \times 0.099} \times \sqrt{\sqrt{0.026 \times 3.15}}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$66. \frac{\sqrt{\frac{13.1 \times 0.0158}{\sqrt{\frac{1.69 \times 0.14}{0.816 \times 0.225}}}}}{\left[\frac{25}{32}\right]^3} \times \frac{15.1 \times 0.118}{0.0508} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$67. \frac{\left[\frac{2.16}{3.98}\right]^2 \times \frac{\pi^2}{4} \times \sqrt{\frac{0.000455}{1.62 \times 1.2}}}{\frac{4.06}{5.25} \times \frac{\sqrt[3]{0.019}}{56,200} \times 0.0884} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$68. \frac{\left[\frac{121}{128}\right]^2 \times \sqrt{\frac{526,000,000 \times 0.185}{1760 \times 21.6 \times 15.2 \times 7}}}{\left[(4.16 \times 92.7 \times 0.0000217)^2 \times 876\right]^2} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$69. \frac{\sqrt{\sqrt{\frac{0.25 \times 617}{0.08 \times 0.326}} \times (1.99 \times \pi^3)^3}}{(0.617 \times \pi)^2 \times 12 \times 5280} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$70. \left[\frac{0.726 \times 0.228}{\left[\frac{1.36 \times 2.75}{4.22 \times 3.09} \right]^2} \right]^2 \times \sqrt{\frac{0.527 \times 1.85}{\sqrt{\frac{3.6 \times 417}{2.19 \times 81.4}}}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$71. \frac{\sqrt{\sqrt{\frac{0.882 \times 1.79}{0.00827 \times 31.2}} \times \sqrt[3]{\frac{26 \times 72}{815 \times 19}}}}{(\pi^3 \times 1.29)^2 \times \sqrt[3]{\pi} \times 0.00487} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$72. \left[\frac{6.71}{\frac{2.09}{42.7}} \right]^3 \times \frac{\left[\left[\frac{302}{916} \right]^2 \times \frac{7.3 \times \pi}{92,600} \right]^2}{\frac{0.202 \times 0.000435}{2.77 \times 37 \times 0.816}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$73. \sqrt{\frac{3.22 \times 0.817}{\sqrt{\frac{0.029 \times 3.16}{0.403 \times 0.526}}}} \times \frac{(\pi^3 \times 0.0042)^2}{\sqrt[3]{\pi} \times \frac{9.99}{256} \times 0.02} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$74. \frac{\left[\left[\frac{3.1 \times 2.77}{0.00000672} \right]^2 \times \frac{\pi}{9} \times \left[\frac{1.1 \times 2.39}{627 \times 414} \right]^3 \right]^2}{\frac{275 \times 616 \times 772 \times 486 \times 399}{804 \times 256 \times 512 \times 128 \times 909}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$75. \sqrt{\frac{\sqrt{\frac{297,000}{846 \times 773}}}{(2.17 \times 0.335)^3}} \times \frac{\left[\left[\frac{25}{32} \times \left[\frac{0.88}{4.62} \right]^2 \right]^2 \right]^2}{0.371 \times 0.502} \text{ ----- equals } \underline{\hspace{2cm}}$$

SLIDE RULE ANSWER KEY S-17

1.	1.37×10^1	1.35×10^1	to	1.39×10^1
2.	1.48×10^2	1.46×10^2	to	1.50×10^2
3.	7.43×10^1	7.41×10^1	to	7.45×10^1
4.	2.27×10^2	2.25×10^2	to	2.29×10^2
5.	3.76×10^{-3}	3.74×10^{-3}	to	3.78×10^{-3}
6.	4.22×10^{-4}	4.20×10^{-4}	to	4.24×10^{-4}
7.	6.12×10^3	6.10×10^3	to	6.14×10^3
8.	4.25×10^1	4.23×10^1	to	4.27×10^1
9.	4.72	4.70	to	4.74
10.	3.79×10^2	3.77×10^2	to	3.81×10^2
11.	4.31	4.29	to	4.33
12.	3.96×10^{-1}	3.94×10^{-1}	to	3.98×10^{-1}
13.	1.31	1.29	to	1.33
14.	5.23×10^2	5.21×10^2	to	5.25×10^2
15.	1.22×10^{-1}	1.20×10^{-1}	to	1.24×10^{-1}
16.	1.66	1.64	to	1.68
17.	5.58×10^{-1}	5.56×10^{-1}	to	5.60×10^{-1}
18.	1.04×10^4	1.02×10^4	to	1.06×10^4
19.	3.30×10^{-1}	3.28×10^{-1}	to	3.32×10^{-1}
20.	1.54×10^{-4}	1.52×10^{-4}	to	1.56×10^{-4}
21.	1.57×10^7	1.55×10^7	to	1.59×10^7
22.	3.29×10^{-1}	3.27×10^{-1}	to	3.31×10^{-1}
23.	2.36×10^{-1}	2.34×10^{-1}	to	2.38×10^{-1}
24.	3.31	3.29	to	3.33
25.	6.48×10^{-7}	6.46×10^{-7}	to	6.50×10^{-7}
26.	9.23×10^{-1}	9.21×10^{-1}	to	9.25×10^{-1}
27.	1.59×10^1	1.57×10^1	to	1.61×10^1
28.	5.84	5.82	to	5.86
29.	1.76×10^2	1.74×10^2	to	1.78×10^2
30.	4.42	4.40	to	4.44
31.	1.51×10^{11}	1.49×10^{11}	to	1.53×10^{11}
32.	1.12×10^4	1.10×10^4	to	1.14×10^4
33.	5.18×10^{-3}	5.16×10^{-3}	to	5.20×10^{-3}
34.	1.77	1.75	to	1.79
35.	3.94	3.92	to	3.96
36.	3.91×10^{-1}	3.89×10^{-1}	to	3.93×10^{-1}
37.	6.26×10^6	6.24×10^6	to	6.28×10^6
38.	1.25×10^{-3}	1.23×10^{-3}	to	1.27×10^{-3}
39.	3.00×10^{-5}	2.98×10^{-5}	to	3.02×10^{-5}
40.	4.84×10^{-8}	4.82×10^{-8}	to	4.86×10^{-8}
41.	2.47×10^{-1}	2.45×10^{-1}	to	2.49×10^{-1}
42.	1.09	1.07	to	1.11
43.	1.61×10^{-1}	1.59×10^{-1}	to	1.63×10^{-1}
44.	6.40×10^{-2}	6.38×10^{-2}	to	6.42×10^{-2}
45.	2.27×10^{-10}	2.25×10^{-10}	to	2.29×10^{-10}
46.	1.43×10^{-5}	1.41×10^{-5}	to	1.45×10^{-5}
47.	1.80	1.78	to	1.82
48.	1.21×10^{-2}	1.19×10^{-2}	to	1.23×10^{-2}
49.	3.61×10^1	3.59×10^1	to	3.63×10^1
50.	1.56×10^7	1.54×10^7	to	1.58×10^7
51.	3.94×10^3	3.92×10^3	to	3.96×10^3
52.	2.11	2.09	to	2.13
53.	3.30×10^3	3.28×10^3	to	3.32×10^3
54.	2.57×10^2	2.55×10^2	to	2.59×10^2
55.	3.27×10^7	3.25×10^7	to	3.29×10^7
56.	2.36×10^6	2.34×10^6	to	2.38×10^6
57.	4.68×10^{-4}	4.66×10^{-4}	to	4.70×10^{-4}
58.	1.33×10^{-4}	1.31×10^{-4}	to	1.35×10^{-4}
59.	2.33×10^3	2.31×10^3	to	2.35×10^3
60.	1.54×10^{-1}	1.52×10^{-1}	to	1.56×10^{-1}
61.	4.29×10^{-2}	4.27×10^{-2}	to	4.31×10^{-2}
62.	5.11×10^{-4}	5.09×10^{-4}	to	5.13×10^{-4}
63.	2.32×10^{-4}	2.30×10^{-4}	to	2.34×10^{-4}
64.	2.33×10^{-6}	2.31×10^{-6}	to	2.35×10^{-6}
65.	2.04×10^1	2.02×10^1	to	2.06×10^1
66.	7.24×10^{-1}	7.22×10^{-1}	to	7.26×10^{-1}
67.	3.02×10^1	3.00×10^1	to	3.04×10^1
68.	1.16×10^3	1.14×10^3	to	1.18×10^3
69.	1.79×10^{-2}	1.77×10^{-2}	to	1.81×10^{-2}
70.	2.35	2.33	to	2.37
71.	9.69×10^{-2}	9.67×10^{-2}	to	9.71×10^{-2}
72.	4.54×10^{-2}	4.52×10^{-2}	to	4.56×10^{-2}
73.	1.19×10^{-7}	1.17×10^{-7}	to	1.21×10^{-7}
74.	1.70×10^{-6}	1.68×10^{-6}	to	1.72×10^{-6}
75.	4.59×10^{-6}	4.57×10^{-6}	to	4.61×10^{-6}