

THE UNIVERSITY INTERSCHOLASTIC LEAGUE

TIE BREAKER

(174)

Number 174

1.  $\frac{\sqrt{2.68 \times 0.0149 \times 3780}}{9.66 \times 1.29 \times 6.48}$  ----- equals \_\_\_\_\_

2.  $\left[ \frac{19.2 \times 0.165 \times 3.78}{(5.22 \times 1.49 \times 2.37)^2} \right]^2 \times \sqrt[3]{\pi}$  ----- equals \_\_\_\_\_

3.  $\left[ \sqrt[3]{\frac{5.72}{0.0617}} \times \left[ \frac{2.16}{3.74} \right]^2 \times \frac{5.83}{7.42} \right]^2$  ----- equals \_\_\_\_\_

4.  $\sqrt{\frac{5.78 \times 3.26}{1.88 \times \sqrt{5.43}}} \times \frac{0.00837}{21 \times 38}$  ----- equals \_\_\_\_\_

5.  $\frac{\sqrt{0.00617} \times 1.45 \times 3.28 \times 1.6}{\left[ \frac{15.2 \times 7.66}{8.39 \times 8.06} \right]^2 \times \frac{0.0427}{\sqrt[3]{0.0279}}}$  ----- equals \_\_\_\_\_

6.  $\frac{\sqrt{\frac{0.338 \times 7.62}{9.61 \times 14.8}}}{\left[ \frac{0.397 \times 1.62}{4.88 \times 2.97} \right]^2} \times \left[ \frac{0.619}{(0.888)^2} \right]^3$  ----- equals \_\_\_\_\_

7.  $\frac{\sqrt{\frac{0.0000000218}{15.2 \times 0.0144}} \times \frac{792 \times 631}{1.45 \times 2.68}}{(14.2 \times 16.8 \times 7.45 \times 0.0165)^2}$  ----- equals \_\_\_\_\_

8.  $\left[ \frac{3.62 \times 0.00492}{\left[ \frac{1.78}{3.94} \right]^2 \times 0.225} \right]^2 \times \sqrt{\frac{1.5 \times 16.3}{\sqrt{7.48 \times 9.22}}}$  ----- equals \_\_\_\_\_

9.  $\frac{\left[ \frac{0.827}{0.0316} \right]^2}{\left[ \frac{1.49}{0.226} \right]^2} \times \frac{\sqrt{\frac{0.827 \times 1.4}{0.0921 \times 76.3}}}{0.504 \times 0.337}$  ----- equals \_\_\_\_\_

$$10. \frac{\sqrt{\sqrt{\sqrt{3.16 \times 1.79} \times 1.52 \times 2.64}}}{\left[\frac{397 \times 416}{505 \times 283}\right]^3 \times \frac{1.74 \times 3.29}{15.6 \times 0.117}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$11. \sqrt{\frac{\sqrt{\pi} \times \sqrt[3]{\pi} \times 0.02}{0.0776 \times 5240}} \times \frac{22 \times 1.8}{0.000392} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$12. \sqrt{\frac{\frac{4.68}{0.0229}}{\frac{0.000714}{0.00000281}}} \times \frac{445 \times \left[\frac{0.397}{4.62}\right]^2}{21.8 \times 0.0193} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$13. \left[ \left[ \frac{0.792 \times 4.18 \times 3.66}{\sqrt[3]{4.92} \times (3.86 \times 1.77)^2} \right]^2 \right]^2 \text{ ----- equals } \underline{\hspace{2cm}}$$

$$14. \left[ \frac{0.00000227}{0.165 \times 1.82} \right]^2 \times \sqrt{\left[ \frac{984 \times 762}{1.3 \times 8.2} \right]^3} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$15. \sqrt[3]{\frac{0.228}{\left[\frac{4.16}{3.28}\right]^2}} \times \frac{4.28 \times 9.62}{\sqrt{\frac{1.79 \times 0.146}{3.26 \times 0.0483}}} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$16. \frac{\sqrt{\frac{0.00796}{2.83 \times 4.99}} \times 0.001 \times \pi^2}{(3.62 \times 1.55)^3 \times 0.000829} \text{ ----- equals } \underline{\hspace{2cm}}$$

$$17. \sqrt{\frac{4.55 \times 0.721}{\sqrt{\frac{4.27 \times 3.08}{\sqrt{0.774 \times 3.16}}}}} \times \left[ \frac{0.754}{\left[\frac{7.22}{3.68}\right]^2} \right]^2 \text{ ----- equals } \underline{\hspace{2cm}}$$

$$18. \frac{0.227 \times \left[ \frac{1.79 \times 0.0862}{0.396 \times 0.552} \right]^2}{\sqrt{\pi^3 \times 0.176 \times 0.0882}} \text{ ----- equals } \underline{\hspace{2cm}}$$

THE UNIVERSITY INTERSCHOLASTIC LEAGUE SLIDE RULE ANSWER KEY				(TIEBREAKER)	#174
1.	$1.52 \times 10^{-1}$	$(1.50 \times 10^{-1})$	to	$1.54 \times 10^{-1}$	
2.	$1.82 \times 10^{-3}$	$(1.80 \times 10^{-3})$	to	$1.84 \times 10^{-3}$	
3.	1.41	(1.39	to	1.43)	
4.	$1.15 \times 10^{-5}$	$(1.13 \times 10^{-5})$	to	$1.17 \times 10^{-5}$	
5.	1.43	(1.41	to	1.45)	
6.	$3.31 \times 10^1$	$(3.29 \times 10^1)$	to	$3.33 \times 10^1$	
7.	$4.72 \times 10^{-2}$	$(4.70 \times 10^{-2})$	to	$4.74 \times 10^{-2}$	
8.	$2.58 \times 10^{-1}$	$(2.56 \times 10^{-1})$	to	$2.60 \times 10^{-1}$	
9.	$8.66 \times 10^{-1}$	$(8.64 \times 10^{-1})$	to	$8.68 \times 10^{-1}$	
10.	$4.63 \times 10^{-1}$	$(4.61 \times 10^{-1})$	to	$4.65 \times 10^{-1}$	
11.	$1.14 \times 10^3$	$(1.12 \times 10^3)$	to	$1.16 \times 10^3$	
12.	7.00	(6.98	to	7.02)	
13.	$5.43 \times 10^{-4}$	$(5.41 \times 10^{-4})$	to	$5.45 \times 10^{-4}$	
14.	$1.07 \times 10^{-3}$	$(1.05 \times 10^{-3})$	to	$1.09 \times 10^{-3}$	
15.	$1.67 \times 10^1$	$(1.65 \times 10^1)$	to	$1.69 \times 10^1$	
16.	$1.60 \times 10^{-3}$	$(1.58 \times 10^{-3})$	to	$1.62 \times 10^{-3}$	
17.	$4.08 \times 10^{-2}$	$(4.06 \times 10^{-2})$	to	$4.10 \times 10^{-2}$	
18.	$1.63 \times 10^{-1}$	$(1.61 \times 10^{-1})$	to	$1.65 \times 10^{-1}$	

Note: If error is found in this key, grade by correct answer

The State Office will appreciate a report of any error found.