Name: _____ Date: _____ Period: ____ #: ____

AP CHEM NON-CALCULATOR MATH REVIEW

Directions: Solve for *x* or answer the question and *show your work.*

1)	$\frac{40 \times 0.1}{50} = x$
2)	$4 \times 10^{-4} = \frac{x^2}{0.01}$
3)	Is *y* greater than or less than 1? Justify your answer. $(1 - x) + x + x = 1.40$ $\frac{x^2}{1 - x} = y$
4)	$0.05 \times \frac{-437}{0.5} = x$
5)	Which is larger, *x* or *y*? Justify your answer. $39 \times \frac{1}{39} \times \frac{1}{1} = x$ $39\ g \times \frac{1}{71} \times \frac{1}{0.5} = y$
6)	$2.00 + -1.22 = x$
7)	$-\log(0.01) = x$
8)	Estimate your answer to within 2 adjacent integers (i.e. 20–21) $-\log(1.3 \times 10^{-5}) = x$
9)	$\frac{0.2^2}{0.8} = x$
10)	Circle the fraction with the largest answer. $\frac{16}{62}$ $\frac{16}{40.3}$ $\frac{16}{94.2}$ $\frac{16}{56.1}$

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11)	Solve for *z*. $2.23 - 0.8 = x$ $x \times \frac{1}{143} \times \frac{1}{1} \times \frac{35}{1} = y$ $0.74 - y = z$
12)	Estimate *y* to within 2 adjacent integers. $\frac{(500 \times 1) - (200 \times 2)}{700} = x$ $-\log(x) = y$
13)	$(2 \times 10^{-6}) \times (1 \times 10^{3})^{2} = x$
14)	$\frac{1 \times 10^{-3}}{5} = \frac{x}{2}$
15)	Is *x* greater than or less than 6.5? Justify your answer. $\frac{2.5}{1.5 \times 1.0} = x$
16)	Estimate *y* to within 2 adjacent integers. $64 \times \frac{1}{16} \times \frac{0.94}{1} = x$
17)	$200 \times 4.2 \times (x - 50) = 8{,}400$
18)	Is *x* greater than or less than 230? Justify your answer. $\frac{0.2 \times 2}{(0.01)^{2}} = x$
19)	What would be the whole number ratio of *x* to *y*? $44 \times \frac{12}{44} \times \frac{1}{12} = x$ $45 \times \frac{2}{18} \times \frac{1}{1} = y$
20)	Is *x* greater than or less than 8×10^{-8}? Justify your answer. $\left(0.064 \times \frac{1}{64}\right)(1 \times 10^{-7})^{2} = x$