

Round approximate answers to 3 decimal places. Give exact answers when specified.

1. _____ If $f(x) = \log\left(\frac{10+4^x}{\sqrt{8^x}}\right)$, what is $f(8)$?
2. _____ Compute: $\frac{2.016}{201.6} + \frac{2016}{\sqrt{2016}\sqrt[3]{2016}} + \frac{2016-20016}{\sqrt[4]{2016}}$
3. _____ How many digits are there in 2^{2016} ?
4. _____ Compute: $\sqrt{2016} - (\sqrt[3]{2016} - (\sqrt[4]{2016} - (\sqrt[5]{2016} - \sqrt[6]{2016})))$
5. _____ If $f(x) = 2x^2 - 20x + 16$, find $f(16)$.
6. _____ What are the two right most digits of 7^{2016} ?
7. _____ If $x = 3.2$ and $y = 2.14$, find the value of $\frac{(x^3 - y^2)}{\sqrt{xy - 2}}$.
8. _____ Compute: $\sin^{-1}\left(\cos\frac{5\pi}{3}\right)$. **Exact** answer is required.
9. _____ If $f(x) = \ln\left(\frac{16+e^x}{x^x}\right)$, find $f(16)$.
10. _____ What is the arithmetic mean of all two-digit, positive even integers?
11. _____ How many minutes are there in this month?
12. _____ Compute: $\sqrt[15]{7\sqrt[5]{2\sqrt[2]{2.173 \times 10^2}}}$
13. _____ How many digits are there in $71!$
14. _____ The total price of a custom-made tuxedo was \$312.12, which includes an 8% sales tax.
What is the price of the tuxedo before tax?
15. _____ Compute: $\frac{1}{1 - \frac{2}{1 - \frac{3}{1 - \frac{4}{1 - \frac{5}{1}}}}}$