

Logarithmic and Exponential Review

Copy the problem

Simplify using properties of logs
and exponents.

1. $e^{\ln x}$

2. $\ln(e^x)$

3. $e^{-\ln(x^2)}$

4. $\ln(e^{-x^2})$

5. $\ln(e^{\frac{1}{x}})$

6. $\ln\left(\frac{1}{e^x}\right)$

7. $e^{\ln 2 + \ln x}$

8. $e^{2\ln x}$

9. $\ln(e^{x-x^2})$

10. $\ln(x^2 e^{-2x})$

11. $e^{x+\ln x}$

12. $e^{\ln x - 2\ln y}$

Inverse Trig Evaluation Review

Copy the problem

Find the angle in radians.

1. $\tan^{-1}(\sqrt{3})$

2. $\tan^{-1}(-1)$

3. $\sin^{-1}\left(\frac{1}{2}\right)$

4. $\sin^{-1}\left(-\frac{\sqrt{3}}{2}\right)$

5. $\cos^{-1}\left(\frac{1}{\sqrt{2}}\right)$

6. $\cos^{-1}\left(-\frac{\sqrt{3}}{2}\right)$

7. $\sec^{-1}(\sqrt{2})$

8. $\sec^{-1}(-2)$

9. $\csc^{-1}\left(\frac{2}{\sqrt{3}}\right)$

10. $\csc^{-1}(-\sqrt{2})$

11. $\cot^{-1}(-\sqrt{3})$

12. $\cot^{-1}(1)$