

2. Solve the system of equations

$$\begin{aligned}y &= 3x - 2 \\y &= x^2\end{aligned}$$

3. Solve and sketch the region satisfying $x^2 - 4x + 3 > 0$ on the real line.

4. Solve and sketch the region satisfying $y \geq x$ and $y \leq -2x + 1$ on the xy plane.

Trigonometry

1. ? radian = 360° .

2. $\cos 0 = ?$ $\sin \frac{\pi}{2} = ?$ $\tan \frac{\pi}{4} = ?$

3. If $\sin x = \frac{1}{4}$, $\cos x = ?$, $\csc x = ?$ $\cot x = ?$

4. if $\cos x = \frac{1}{3}$, $\sin 2x = ?$, $\tan 2x = ?$

5. Sketch the graph of $y = f(x) = 2 \cos(2x) - 1$.

6. List all x so that

(a) $\sin 3x = 0$

(b) $\tan 4x = 1$

Exponential and Logarithmic Functions

1. $e \approx ?$

A. 4.883 B. 3.141 C. 2.718 D. 1.602×10^{-19}

2. Power rules

(a) $a^n b^n = ?$

(b) $a^x a^y = ?$

(c) $\frac{a^x}{a^y} = ?$

3. Logarithms

(a) $\log_{10} 25 + \log_{10} 4 = ?$

(b) $\frac{\ln e^{\frac{3}{2}}}{\ln \sqrt{e}} = ?$

(c) $\log_3 4 \cdot \log_4 5 \cdot \log_5 9 = ?$