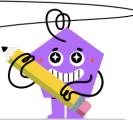


mobius

Logarithm Algebra (Quotient Property) - 🧨 To Answer (Coefficient 1)



Use the quotient rule to simplify this to a quadratic and solve for 'w'

$$\log_7(m+2) - \log_7(m+2) = \log_7(1m)$$

$$\log_6(w+2) - \log_6(w+2) = \log_6(-1w)$$

 $\log_6(w+2)-\log_6(w+2)=\log_6(-1w)$ Use the quotient rule to simplify this to a quadratic and solve

$$\hat{w} = -1$$

$$w = -11$$

$$-1$$
 $\ket{w}=-11$ $m=1$ $m=-6$ $m=9$

$$^{\mathbf{3}}\mathsf{log}_{5}(q+4) - \mathsf{log}_{5}(q-2) = \mathsf{log}_{5}(1q)$$

$$\log_5(q+4) - \log_5(q-2) = \log_5(1q) \log_7(w+3) - \log_7(w+3) = \log_7(1w)$$

Use the quotient rule to simplify this to a quadratic and solve Use the quotient rule to simplify this to a quadratic and solve

$$\stackrel{\scriptscriptstyle{\mathsf{A}}}{q}=\mathsf{12}\stackrel{\scriptscriptstyle{\mathsf{B}}}{q}=\mathsf{-4}\stackrel{\scriptscriptstyle{\mathsf{C}}}{q}=\mathsf{4}\stackrel{\scriptscriptstyle{\mathsf{A}}}{w}=\mathsf{-3}\stackrel{\scriptscriptstyle{\mathsf{B}}}{w}=\mathsf{-8}\stackrel{\scriptscriptstyle{\mathsf{C}}}{w}=$$

$$oxed{w} = -3 oxed{w} = -8 oxed{w} = 1$$

$$\log_7(x+3) - \log_7(x+3) = \log_7(1x)$$

$$\log_7(x+3) - \log_7(x+3) = \log_7(1x) \left| {}^6 \log_4(z+3) - \log_4(z-1) = \log_4(1z) \right|$$

Use the quotient rule to simplify this to a quadratic and solve Use the quotient rule to simplify this to a quadratic and solve

$$|x|=2|x|=-5|x|=1|z|=3|z|=-5$$

$$\begin{vmatrix} z & z \end{vmatrix} = 3 \begin{vmatrix} z & z \end{vmatrix} = -2 \begin{vmatrix} z & z \end{vmatrix} = -3$$

7 Use the quotient rule to simplify this to a quadratic and solve for 'x'

Use the quotient rule to simplify this to a quadratic and solve for 'q'

$$\log_3(x+7) - \log_3(x+7) = \log_3(1x)$$

$$\log_3(x+7) - \log_3(x+7) = \log_3(1x) \log_5(q+11) - \log_5(q+11) = \log_5(1q)$$

$$\hat{\ }x=10$$

$$x = 1$$

$$q = 1$$

$$q = -4$$