

2 ways to show a check

Claude solved this equation and got

$$X = 2 \qquad 2X - 10X = -4$$

Show a check to see if he is correct

① Write original equation

② Substitute 2 for x
Put ? on = sign
Follow order of operations

③ $X = 2$ does not work
since we get a contradiction

Check

$$\begin{array}{r} 2X - 10X = -4 \\ 2(2) - 10(2) \stackrel{?}{=} -4 \\ 4 - 20 \stackrel{?}{=} -4 \\ -16 \neq -4 \end{array}$$

or

T-check

$$\begin{array}{r} 2X - 10X = -4 \\ \hline 2(2) - 10(2) \\ 4 - 20 \\ -16 \neq -4 \end{array}$$