The domain is all values that x is allowed to be. Since I can't divide by zero (division by zero isn't allowed,

I need to find all values of x that would cause division by zero.

When is this denominator equal to zero?

 $x^2 - 21 x + 80 = 0$

The domain will then be all other x-values.

x=5 or 16 then the domain of w is $\{x \mid x \neq 5 \text{ or } 16\}$