Finding width and length

This task is about using equations to solve maths problems.

A rectangular tapa display is 8 cm higher than it is wide. It took 96 cm of framing to go right round it. Jared wrote this algebra statement to help her find the width and the length of the tapa display:

$$w + (w + 8) = 48$$

a) What part of the frame of the painting does the w stand for?

b) What part of the frame of the painting does the (w + 8) stand for?

c) Why is the answer to the equation above 48 when it takes 96 cm to go right around the painting?

d) i) What is the width of the painting? cm

ii) What is the length of the painting? cm

Published on https://newzealandcurriculum.tahurangi.education.govt.nz