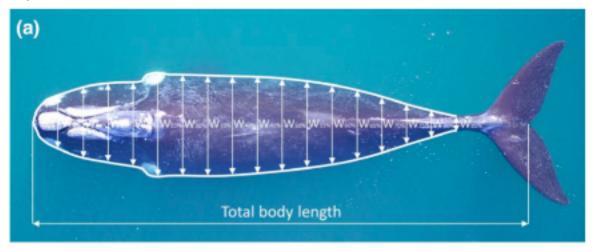
Weighing a Whale

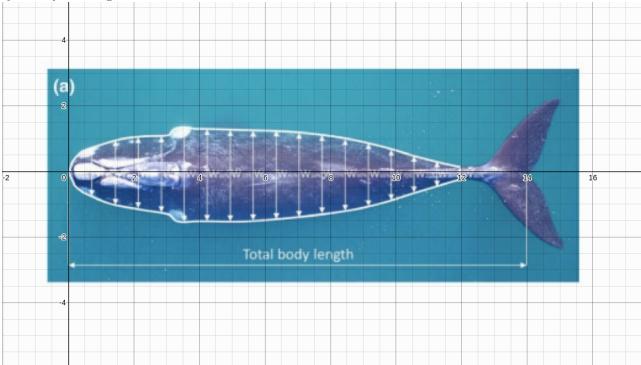
1 Finding the weight and density of a whale

Assume the length of the whale in the picture is 14 m long and the length has been measured accurately using drones.



https://www.bbc.com/news/science-environment-49893849

1. Add this image to geogebra or desmos and adjust the scale appropriately. Have the horizontal axis of symmetry lie along the x-axis.



The **girth** of the whale at a given point is the circumference of the circular cross-section at this point.

- 2. From your diagram work out an estimate for the maximum girth of the whale.
- $3.4 \mathrm{m}$