

Quiz 1

Name: Key*You must show your work to get full credit.*

1. A 10 in largemouth bass weighs .48 lbs. Use this to estimate the weight of a 24 in bass.

Estimated weight is 6.636 lbs.

To get a 24 in bass from a 10 in bass we
scale (magnify) by a factor of

$$\lambda = \frac{24}{10} = 2.4$$

So

$$\begin{aligned}\text{Weight of 24 in bass} &= \lambda^3 (\text{Weight of 10 in bass}) \\ &= (2.4)^3 (.48) \\ &= 6.636 \text{ lbs.}\end{aligned}$$