

81 (a) $f(2) = 0.445(2)^{1.25} \approx 1.06$ grams.

(b) We must solve the equation $f(x) = 0.445x^{1.25} = 0.5$ for x . Graph $Y_1 = 0.445X^{1.25}$ and $Y_2 = 0.5$. Their graphs intersect near $(1.1, 0.5)$. See *Figure 81*. When the claw weighs 0.5 grams the crab weighs approximately 1.1 grams.

$[0, 2, 0.2]$ by $[0, 1, 0.2]$

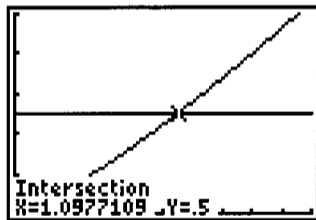


Figure 81

(c) $0.445x^{1.25} = 0.5 \Rightarrow x = \left(\frac{0.5}{0.445}\right)^{1/1.25} \approx 1.1$ grams.