The price of sugar is *directly proportional* to the weight, and 8 oz. costs $2.56.

(a) Give the price $P$ as a function of weight $w$. Graph the function with each axis labeled by name, symbol, and unit and with a specific positive point plotted. State the domain and range.

(b) What is the price for 10 pounds of sugar?

(c) Solve for the weights that keeps the price *at most* $18.