1.6 Solving the Consumer's Problem - Practice Problems

Ryan Safner

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You can get utility from consuming Burgers (b) and Fries (f), according to the utility function:

$$u(b, f) = \sqrt{bf}$$

The marginal utilities are:

$$MU_b = 0.5b^{-0.5}f^{0.5}$$
$$MU_f = 0.5b^{0.5}f^{-0.5}$$

You have an income of \$20, the price of Burgers is \$5, and the price of Fries is \$2. Put Burgers on the horizontal axis and Fries on the vertical axis.

1. What is your utility-maximizing bundle of Burgers and Fries?

2. How much utility does this provide?