Your younger sister receives a weekly allowance of $20, which she spends entirely on nail polish and candy bars. Nail polish costs $4 per bottle, and candy bars are $1. Draw your sister's budget line. What is the opportunity cost of a bottle of nail polish? Would the opportunity cost of nail polish change if the prices of nail polish and candy bars doubled?

Show how the budget line will shift for each of the following changes. Calculate the opportunity cost of each item for each of the changes.

a. An increase in the weekly allowance to $24.

b. A decrease in the weekly allowance to $12.

c. A reduction in the price of a bottle of nail polish to $2.

d. An increase in the price of candy bars to $2.