

**1.** The following table shows how the marginal benefit of shoes of given quality varies with the number Jill purchases each year . As shown, the price of shoes is \$29.99 per pair.

Pairs purchased per year	Marginal benefit, \$	Price, \$
1	50	29,99
2	40	29,99
3	30	29,99
4	20	29,99
5	10	29,99

**a.** Assuming Jill is rational and the price of shoes accurately reflects the marginal cost to her, how many pairs of shoes will Jill buy per year?

**b.** Suppose the price of shoes increases to \$39.99 per year. Assuming nothing else changes, how many pairs will Jill now buy?

**2.** Suppose the marginal benefit of a pair of shoes for Joe is exactly double the marginal benefit indicated for Jill in the previous example. If the price of shoes for Joe is also \$29.99, and Joe is rational, how many pairs of shoes per year will Joe buy?