Figure 2-1: Indifference curves
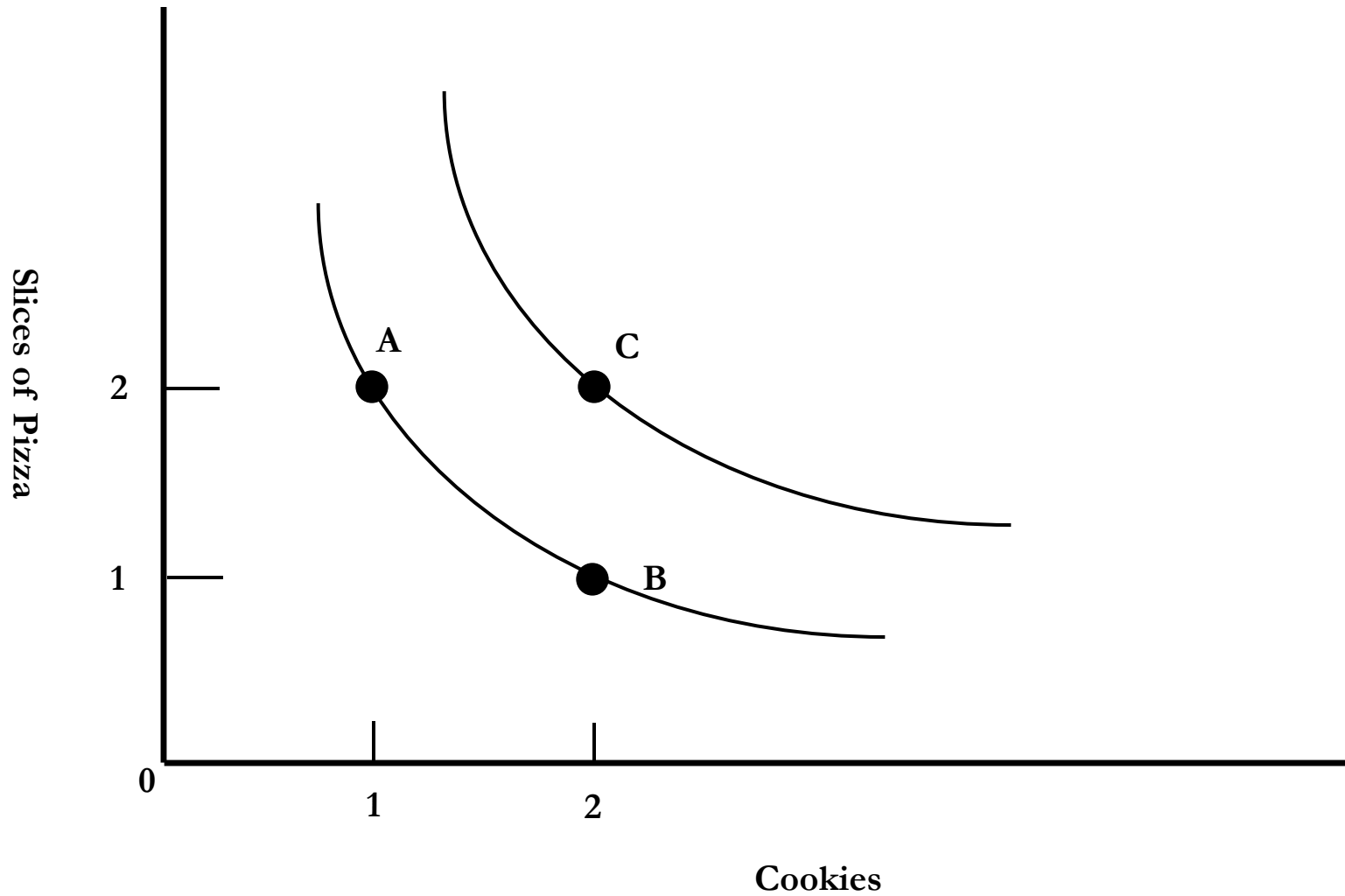
Slices of Pizza

A

C

2

1

B

0

1

2

Cookies

1

Figure 2-2: Upward-sloping indifference curve

Slices of Pizza

2 — ● (2, 2)

1 — ● (1, 1)

0

1   2

Cookies
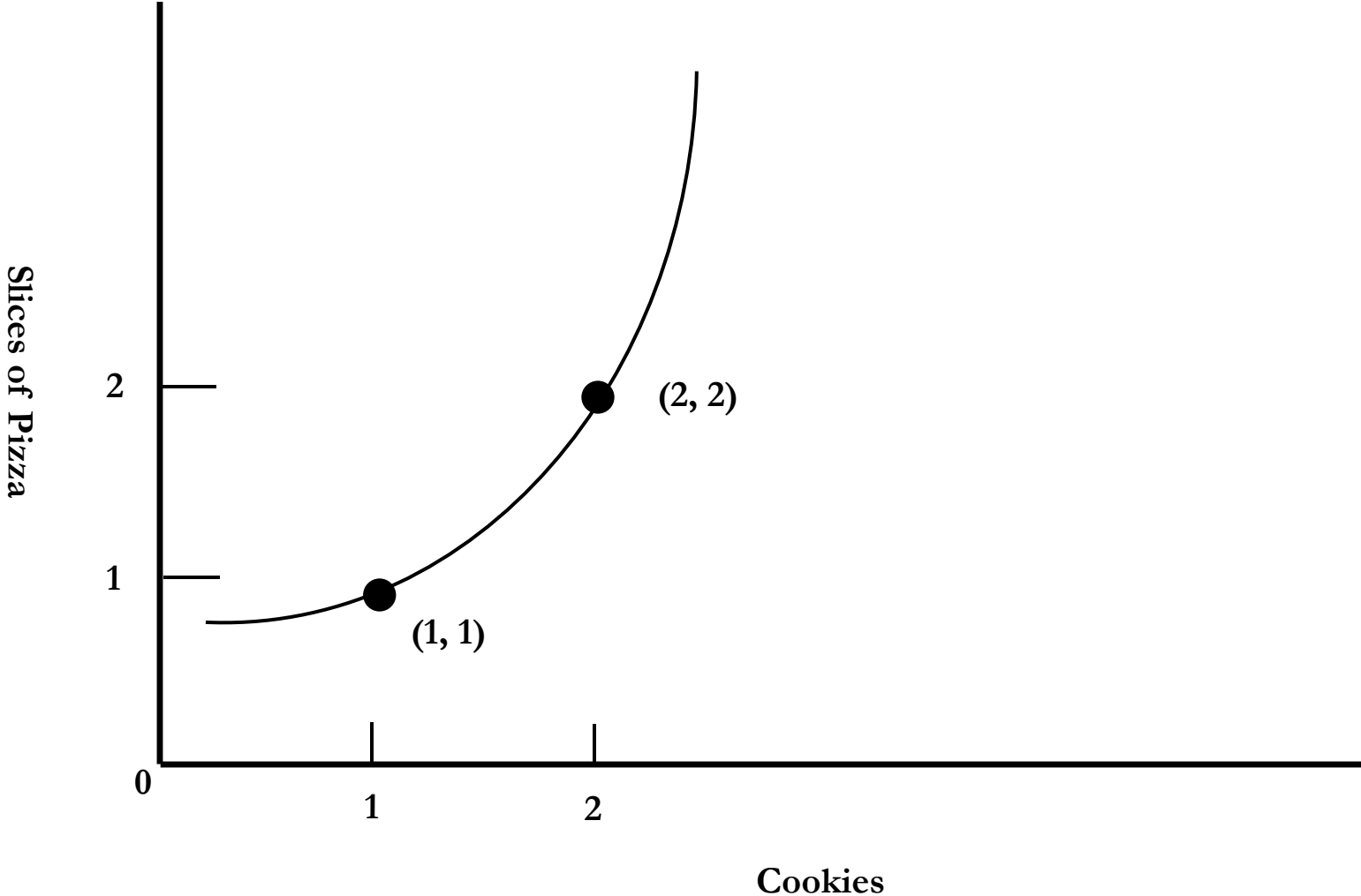
Figure 2-3: Indifference curves crossing

Slices of Pizza

2

1

0

A

B

C

1

2

Cookies
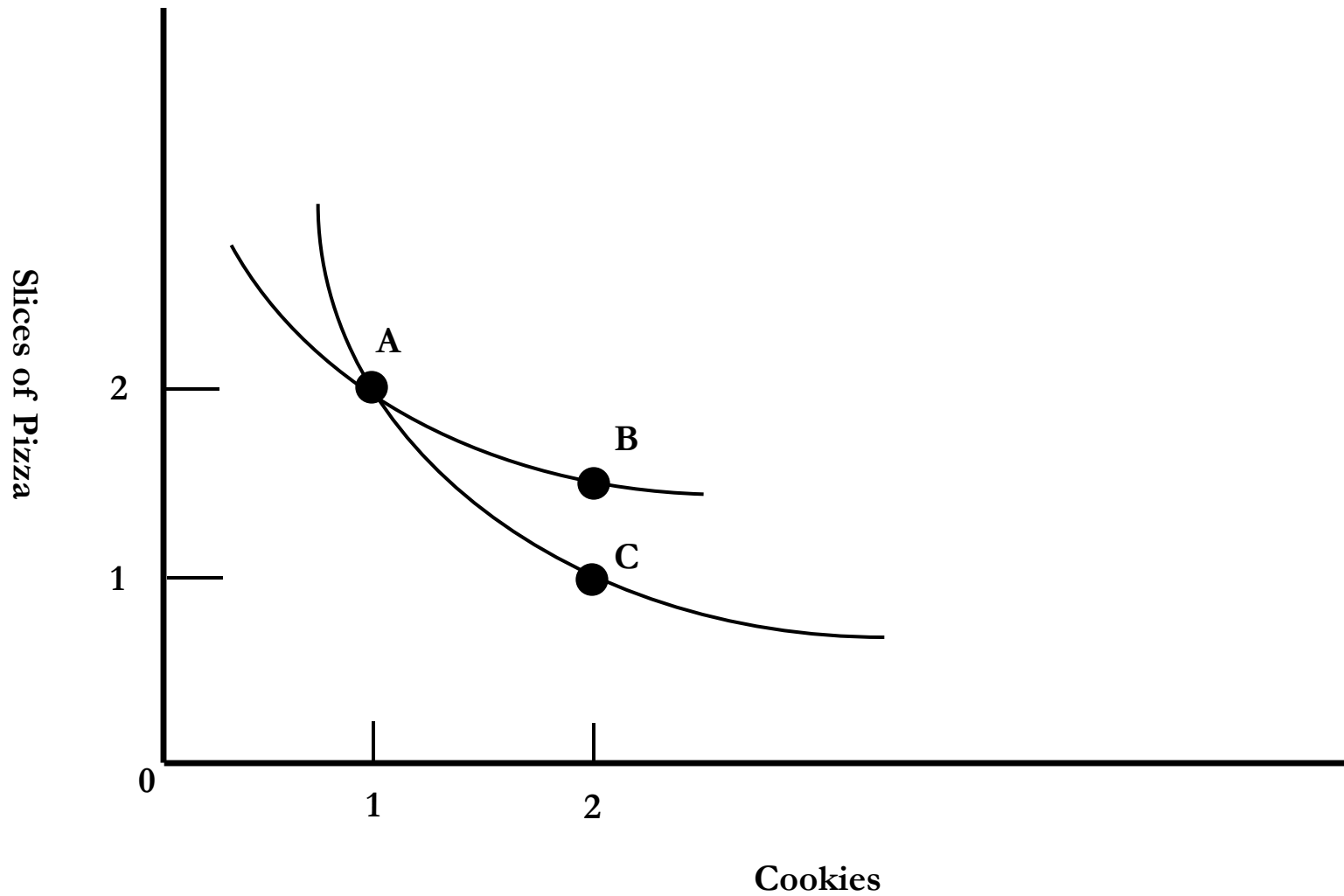
Figure 2-4: Utility levels for $U = \sqrt{P \cdot C}$

Holding slices of pizza constant at 2

Utility

$U = \sqrt{2 \cdot C}$

(4, 2.83)

(3, 2.45)

(2,2)

(1, 1.4)

Cookies
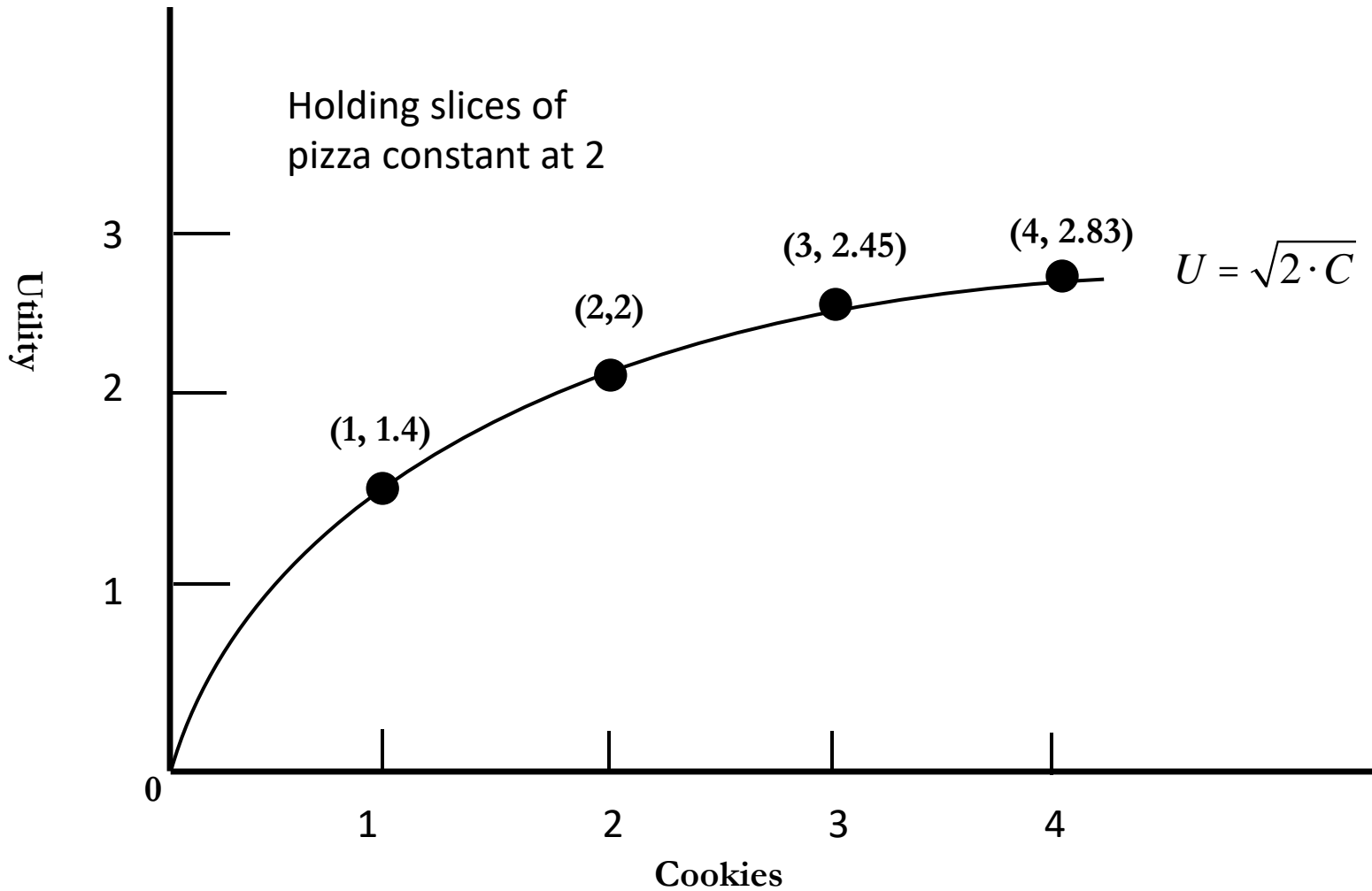
Figure 2-5: Diminishing marginal utility for $U = \sqrt{P \cdot C}$

Holding slices of
pizza constant at 2

Marginal utility

(1, 1.4)

(2, .59)

(3, .45)

(4, .38)

0

Cookies
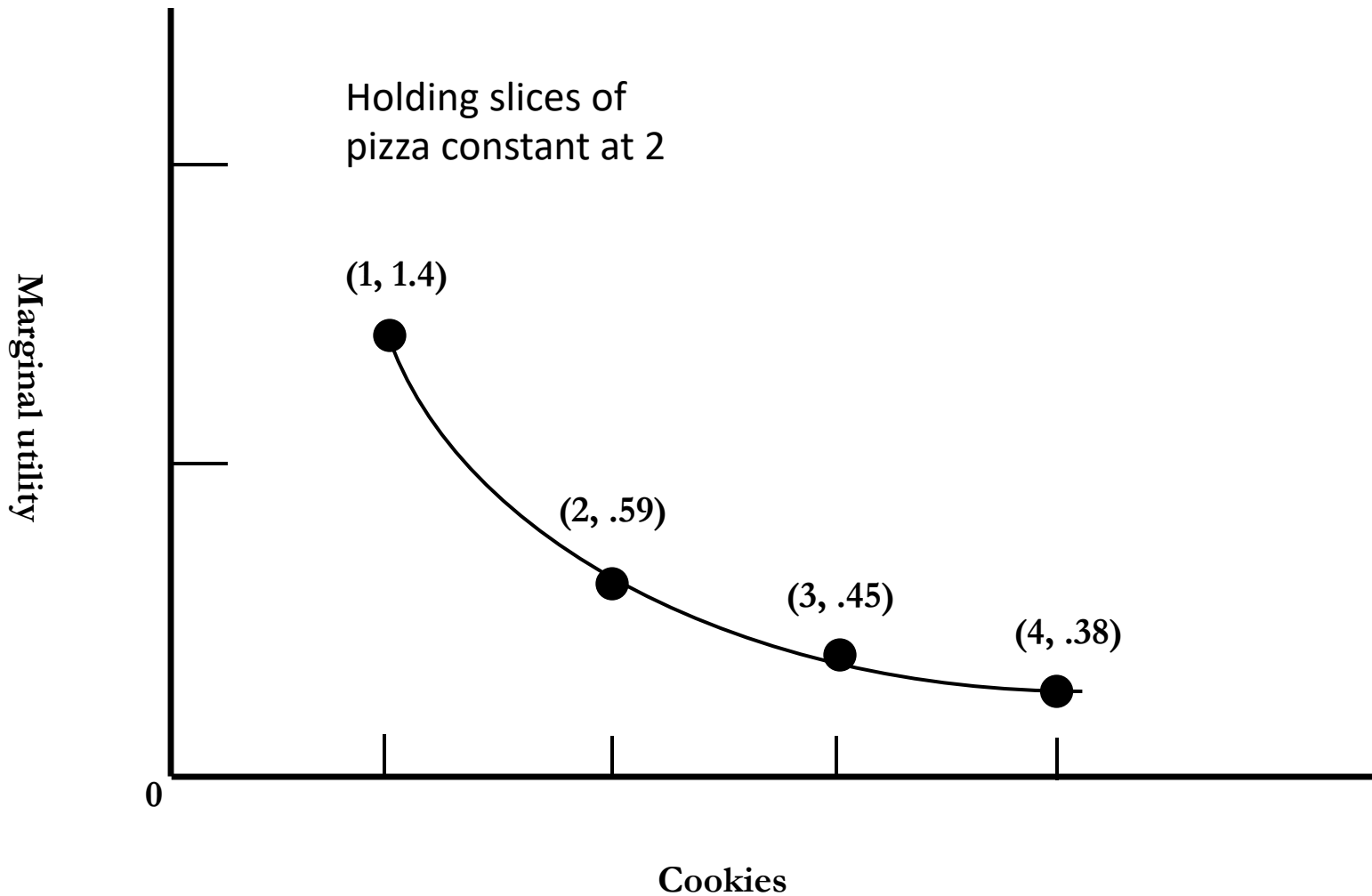
Figure 2-6: Indifference curve and MRS

Slices of Pizza (y-axis)

Cookies (x-axis)

A (1,4)

-2

1

$MRS = -2$

B (2,2)

-1

2

$MRS = -1/2$

C (4,1)
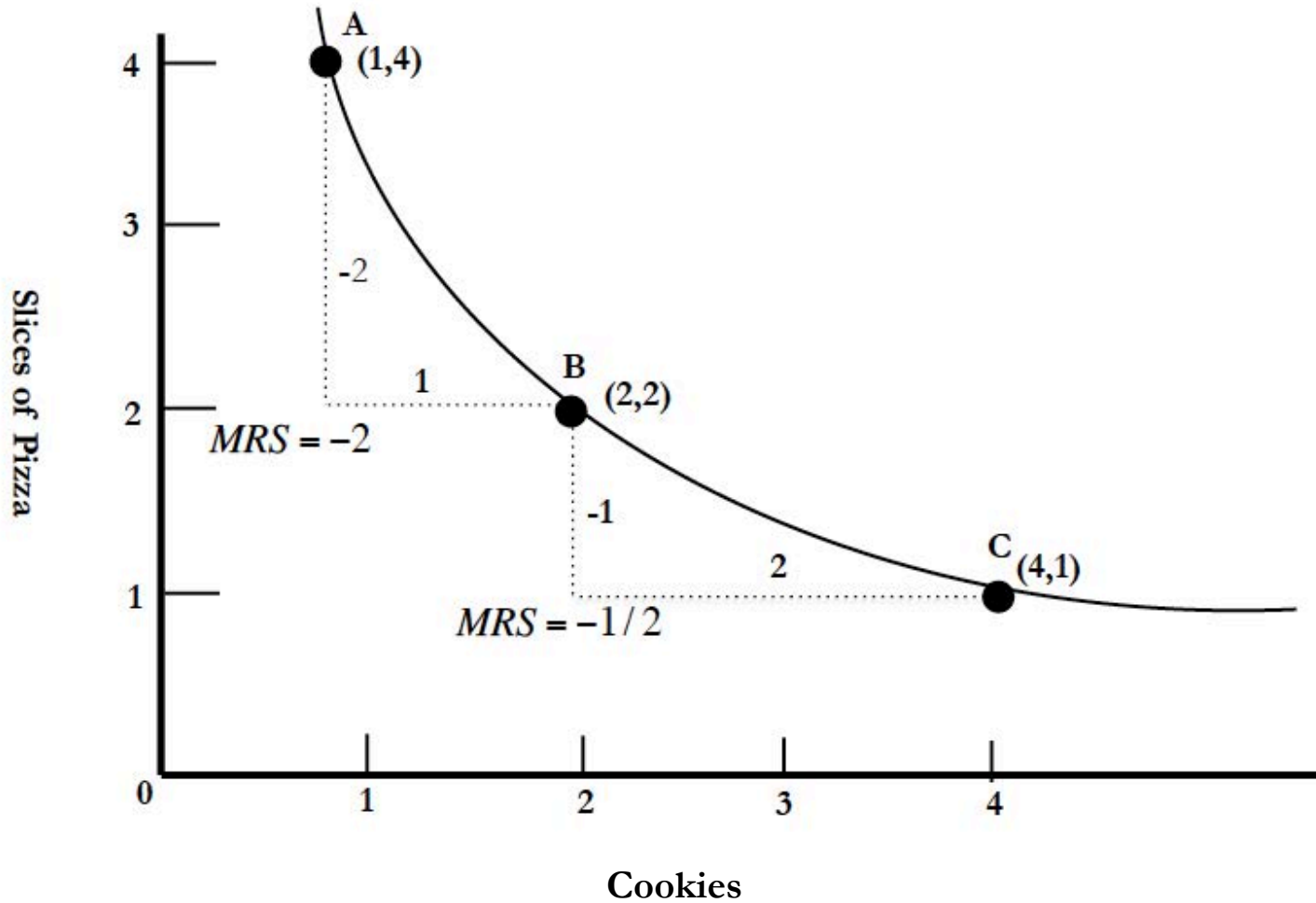
Figure 2-7: Concave indifference curve

Slices of Pizza

Cookies

A   (1,8)

-1

B   (4,7)

3

$MRS = \dfrac{-1}{3}$

-3

C   (7,4)

3

MRS=-1

8

7

4

0   1   4   7
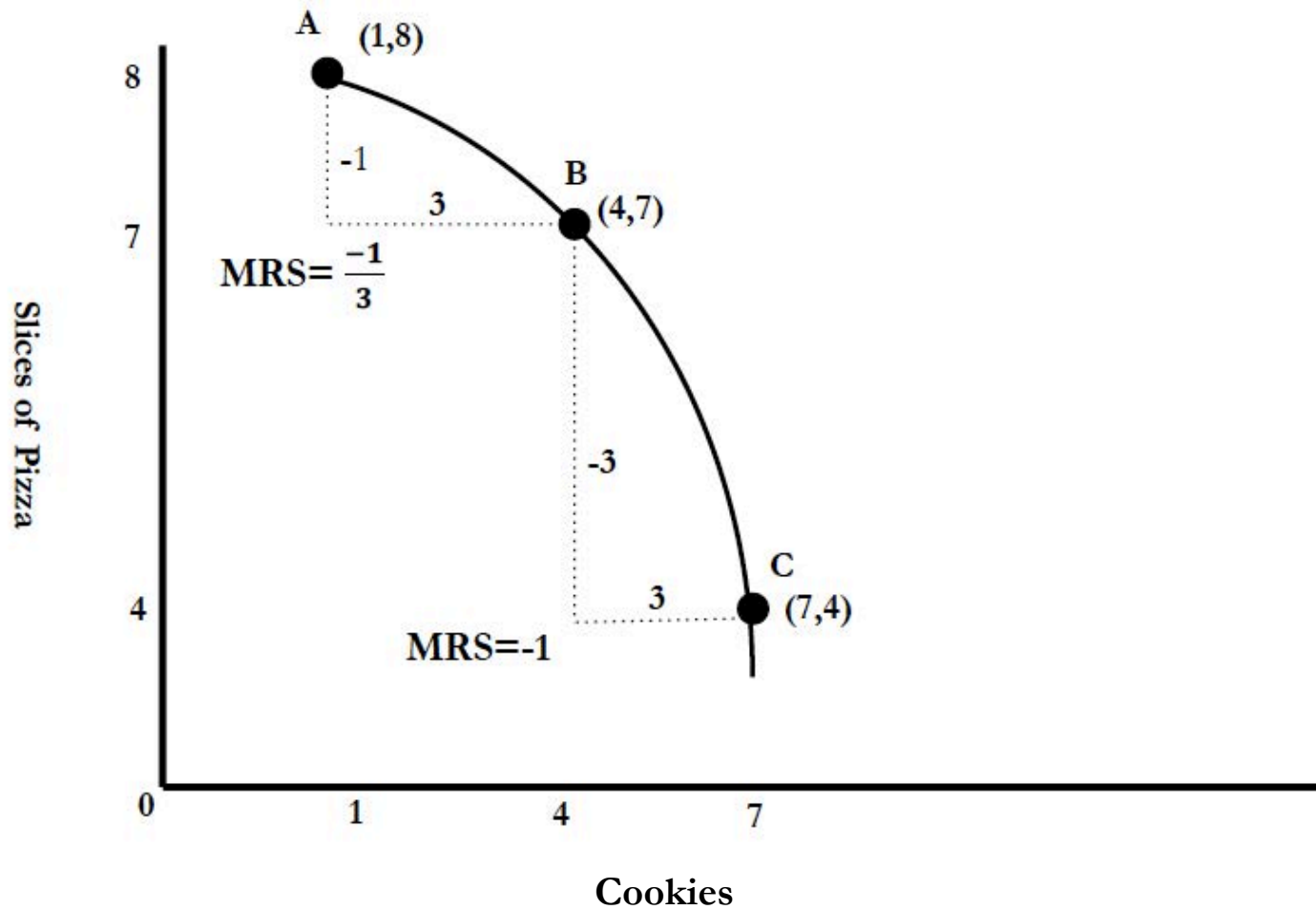
14.01 Principles of Microeconomics
Fall 2023