University of Lethbridge – Department of Economics
ECON 1010 – Introduction to Microeconomics
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Lab #8

Chapter 8 — Possibilities, Preferences, and Choices

1) What is the relationship between the budget equation and the budget line?
   A) The budget equation describes the budget line as a mathematical formula.
   B) The budget line shows all possible consumption opportunities, and the budget equation gives the maximum possible consumption.
   C) The budget line and budget equation both are determined by prices and income.
   D) The budget line and budget equation both are determined by prices only.
   E) There is no relationship.

   Answer: A

Use the figure below to answer the following question(s).

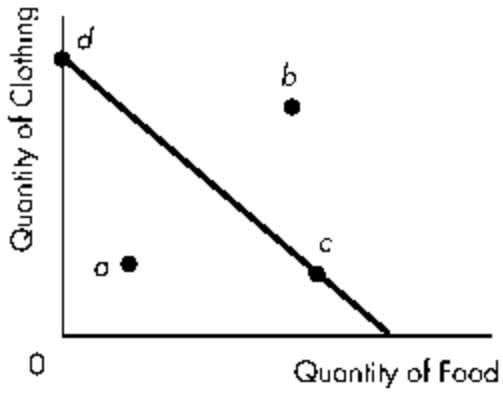

Figure 8.2

2) Shelly's budget line is depicted in Figure 8.2. Which point(s) shows unattainable consumption choices given her income and current prices?
   A) *a*
   B) *b*
   C) *c*
   D) *d*
   E) both *c* and *d*

   Answer: B

3) Shelly's budget line is depicted in Figure 8.2. Which point(s) show attainable and efficient consumption choices given her income and current prices?

A) *a*
B) *b*
C) *c*
D) *c* and *d*
E) *a*, *c* and *d*

Answer: D

4) Sharon has an income of $500 with which she can purchase textbooks, groceries, and leisure activities. Textbooks cost $40 each, groceries cost $25 a purchase, and leisure costs $10 per hour. What is Sharon's real income in terms of leisure?

A) 2.5 hours
B) 20 hours
C) 50 hours
D) 35 hours
E) 6.67 hours

Answer: C

5) The price of one good divided by the price of another is called

A) an absolute price.
B) a relative price.
C) a marginal price.
D) a demand price.
E) a money price.

Answer: B

6) Guy has an income (Y) of $50 with which he can purchase records (R) at $10 per album and compact discs (C) at $20 per disc. Which one of the following best represents Guy's budget constraint?

A) $Y = 10Q_R + 20Q_C$
B) $50 = Q_R + Q_C$
C) $Y = 50 + Q_R + Q_C$
D) $20Y = QR + 10Q_C$
E) $50 = 10Q_R + 20Q_C$

Answer: E

7) If the price of the good measured on the horizontal axis increases, the budget line will

A) become steeper.
B) shift leftward and become steeper.
C) shift leftward but parallel to the original budget line.
D) shift rightward but parallel to the original budget line.
E) become flatter.

Answer: A

8) If income increases, the budget line will
A) become steeper.
B) become flatter.
C) shift leftward but parallel to the original budget line.
D) shift rightward but parallel to the original budget line.
E) shift parallel but leftward or rightward depending on whether a good is normal or inferior.

Answer: D

9) Suppose all prices double and income also doubles. Which statement is true?
A) The best affordable point remains the same.
B) The slope of the budget line increases.
C) The slope of the budget line decreases.
D) The budget line moves away from the origin.
E) The consumption of normal goods will rise.

Answer: A

10) Zarina's income allows her 3 tomatoes and no toothbrushes, or 2 toothbrushes and no tomatoes. The relative price of toothbrushes (price toothbrush/price tomato) is
A) 2/3.
B) 3/2.
C) 6/1.
D) 1/6.
E) impossible to calculate without additional information.

Answer: B

11) A change in the price of the good measured on the horizontal (x) axis will change which aspect(s) of the budget equation?
A) slope and y-intercept
B) slope and x-intercept
C) x- and y-intercepts but not slope
D) slope only
E) none of the above

Answer: B

Use the figure below to answer the following question(s).

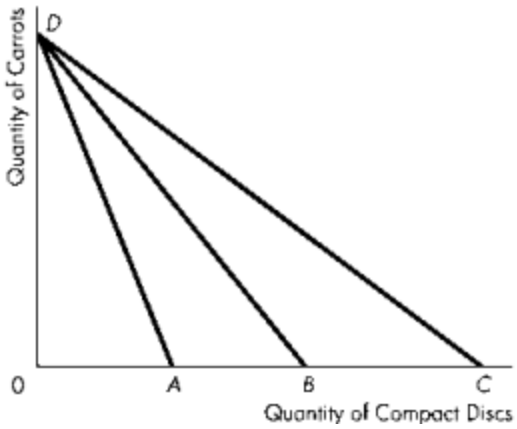

Figure 8.3

12) Refer to Figure 8.3. Which budget line results in the most real income in terms of compact discs?
A) *AD*
B) *BD*
C) *CD*
D) Real income is equal for all three budget lines.
E) Cannot tell unless we know the indifference curves.

Answer: C

13) Refer to Figure 8.3. Which budget line has the lowest relative price for compact discs?
A) *DA*
B) *DB*
C) *DC*
D) The relative price is equal for all three budget lines.
E) Cannot tell unless we know the indifference curves.

Answer: C

14) If Larry consumes only beer (*B*) and chips (*C*), the equation of his budget line (with beer on the vertical axis) is
A) $Q_B = Y/P_B - (P_C/P_B)Q_C$.
B) $QB = Y - (P_C/P_B)Q_C$.
C) $Q_B = Y/P_C - (P_B/P_C)Q_C$.
D) $Q_B = Y/P_B - (P_C/P_B)Q_B$.
E) $QC = Y/P_C - (P_B/P_C)Q_B$.

Answer: A

15) If Larry consumes only beer (B) and chips (C), his real income in terms of beer is
A) P_C/Y.
B) $P_C \times P_B$.
C) Y/P_C.
D) Y/P_B.
E) P_C/P_B.

Answer: D

16) An indifference curve is best defined as
A) a ranking of preferred consumption bundles.
B) a boundary line defining production possibilities.
C) the set of all bundles that the consumer enjoys equally well.
D) the level of consumption where a consumer is indifferent to receiving more consumption.
E) a boundary line between attainable and unattainable choices.

Answer: C

17) The marginal rate of substitution is defined as
A) the amount of good Y substituted for good X by a consumer.
B) the amount of good Y that a consumer is willing to substitute for an additional unit of good X and stay at a given level of satisfaction.
C) the feasible rate of substitution given prices.
D) the substitution effect.
E) the slope of the budget line.

Answer: B

18) The tendency for the marginal rate of substitution to decrease as a consumer moves along an indifference curve is known as
A) the law of demand.
B) the principle of diminishing marginal rate of substitution.
C) the principle of diminishing marginal benefit.
D) the income effect.
E) the substitution effect.

Answer: B

19) Leah consumes at a point on her budget line where her marginal rate of substitution is less than the magnitude of the slope of her budget line. As Leah moves towards her optimum point, she will move to
A) a lower budget line.
B) a higher budget line.
C) a lower indifference curve.
D) a higher indifference curve.
E) a tangent point on the same indifference curve.

Answer: D

20) At the best affordable point, what is the relationship between the indifference curve and the budget line?
A) The level of the indifference curve equals the slope of the budget line.
B) The slope of the indifference curve exceeds the slope of the budget line.
C) The slope of the budget line exceeds the slope of the indifference curve.
D) The slope of the indifference curve equals the slope of the budget line.
E) The level of the indifference curve equals the level of the budget line.

Answer: D

Use the figure below to answer the following question(s)

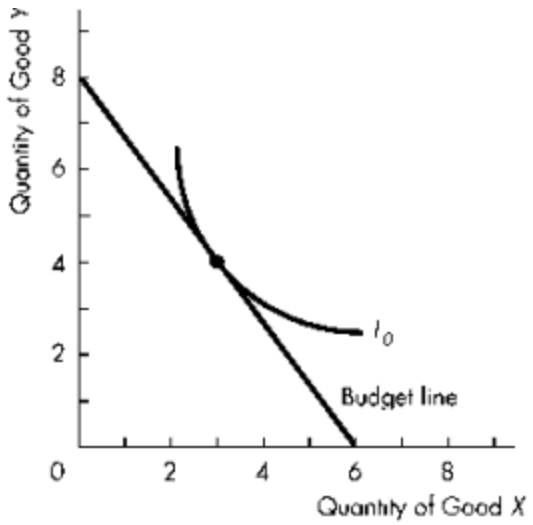

Figure 8.7

21) Consider the budget line and indifference curve in Figure 8.7. If the price of good *X* is $1, then the price of good *Y* is
A) $0.75.
B) $1.
C) $1.25.
D) $2.
E) $1.33.

Answer: A

22) Consider the budget line and indifference curve in Figure 8.7. At the best affordable point, the marginal rate of substitution is
A) 1/2.
B) 2.
C) 4/3.
D) 3/4.
E) 4.

Answer: C

23) The change in consumption due to a change in income is known as the

A) income effect.

B) substitution effect.

C) normal effect.

D) inferior effect.

E) price effect.

Answer: A

24) When the price of a good changes, the change in consumption that leaves the consumer indifferent between the two choices is called the

A) normal effect.

B) substitution effect.

C) income effect.

D) price effect.

E) inferior effect.

Answer: B

Use the figure below to answer the following question(s).

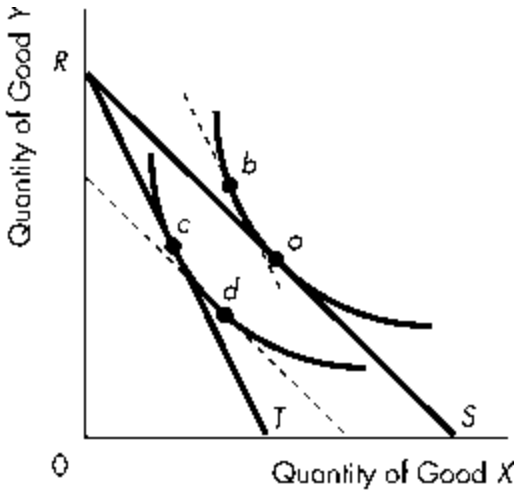

Figure 8.10

25) Consider an initial budget line labelled *RS* in Figure 8.10. What would cause the budget line to pivot to *RT*?

A) a rise in the price of good *X*

B) a fall in the price of good *X*

C) a rise in the price of good *Y*

D) a decrease in the preference for good *X*

E) an increase in real income

Answer: A

26) Consider an initial budget line labelled *RS* in Figure 8.10. If the budget line rotates to *RT*, the substitution effect is illustrated by the move from point

A) *a* to *b*.
B) *a* to *c*.
C) *a* to *d*.
D) *b* to *d*.
E) *d to c*.

Answer: A

27) Consider an initial budget line labelled *RS* in Figure 8.10. If the budget line rotates to *RT*, the income effect is illustrated by the move from point

A) *a* to *b*.
B) *a* to *c*.
C) *a* to *d*.
D) *b* to *c*.
E) *b* to *d*.

Answer: D

28) Consider an initial budget line labelled *RT* in Figure 8.10. What would cause the budget line to pivot to *RS*?

A) a rise in the price of good *X*
B) a fall in the price of good *X*
C) a rise in the price of good *Y*
D) a decrease in the preference for good *X*
E) an increase in real income

Answer: B

29) Consider an initial budget line labelled *RT* in Figure 8.10. If the budget line shifts to *RS*, the substitution effect is illustrated by the move from point

A) *a* to *c*.
B) *a* to *d*.
C) *b* to *d*.
D) *b* to *a*.
E) *c* to *d*.

Answer: E

30) The income effect

A) usually dominates the substitution effect.
B) usually dominates the price effect.
C) plus the price effect equals the substitution effect.
D) minus the price effect equals the substitution effect.
E) plus the substitution effect equals the price effect.

Answer: E