

# Human Services

## Introduction to Cosmetology

### Multiple Choice Math Assessment Problems

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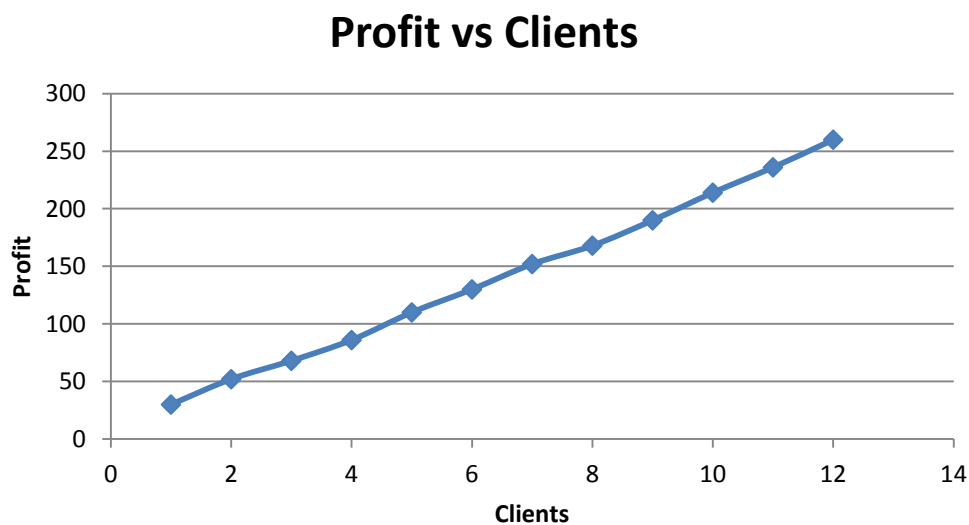


All math problems address TEKS 130.251. Introduction to Cosmetology.

(1) The student implements the employability characteristics of a successful worker in the workplace. The student is expected to:

(C) interpret patterns of current information and resources on personal care services to attract new clientele and satisfy and retain present clientele.

**Question 1.** Analyze the graph below that describes a successful hair salon.



According to the graph, about how much profit can the salon expect to make from 14 clients?

- a. \$250
- b. \$260
- c. \$275
- d. \$300

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(C) interpret patterns of current information and resources on personal care services to attract new clientele and satisfy and retain present clientele.

**Question 2.** Based on the graph in #1, which of the following could be a reasonable conclusion?

- a. As clients increase, profit decreases.
- b. As profit increases, clients decrease.
- c. As clients increase, profit increases.
- d. As clients decrease, profit stays the same.

(2) The student applies academic skills to the field of cosmetology. The student is expected to:

- (D) investigate organizational policies, procedures, and regulations to establish personal care organization priorities to accomplish the mission and provide high-quality service to a diverse set of clients.

**Question 3.** Lucy's hair salon makes an average of \$15 profit for every female client  $f$  and \$12 for every male client  $m$ . If her salon sees 25 clients in one day and makes \$260 profit, which system of equations could be used to find out how many clients of each gender visited her salon?

- a.  $m + f = 25$   
 $m + f = 260$
- b.  $m + f = 25$   
 $15m + 20f = 260$
- c.  $m + f = 25$   
 $12m + 15f = 260$
- d.  $m + f = 260$   
 $15m + 20f = 25$

(5) The student experiments with the concepts and skills of the profession to simulated and actual work situations. The student is expected to:

- (D) propose advertising principles when selecting and using media to attract and retain clientele.

**Question 4.** Raquel is adding up the bill for her client, who came in for a haircut and also bought a few hair products. Normally, the haircut by itself costs \$24.95, but if her client spends over \$30 on hair products, she gets a 15% discount on the haircut price. If her client buys a can of hairspray for \$13.95, shampoo that costs \$8.95 and conditioner that costs \$9.95, what is her client's total bill before taxes?

- a. \$21.20
- b. \$27.92
- c. \$49.12
- d. \$54.05

(3) The student describes the function and application of the tools, equipment, technologies, and materials used in cosmetology. The student is expected to:

(C) interpret systems needed to obtain the range of personal care resources needed for business practice and to access resources at appropriate times.

**Question 5.** Beautiful Nails nail salon offers two different types of artificial nails: regular acrylic and gel. They make \$6 profit on every set of acrylic nails and \$7 profit on every set of gel nails. If they saw 42 clients in one day and made \$274, how many sets of each type of nails were sold?

- a. 20 acrylic, 22 gel nails
- b. 40 acrylic, 2 gel nails
- c. 22 acrylic, 20 gel nails
- d. 2 acrylic, 40 gel nails

(2) The student applies academic skills to the field of cosmetology. The student is expected to:

(E) compare economic and accounting principles and practices when providing personal care services to promote business success and growth.

**Question 6.** Chris owns his own business as a barber. He wants to make sure that he makes enough money to cover his expenses. If he can expect to make \$7 per client and his business sees  $c$  clients per week, which inequality represents what his monthly expenses,  $E$ , need to be in order to make a profit?

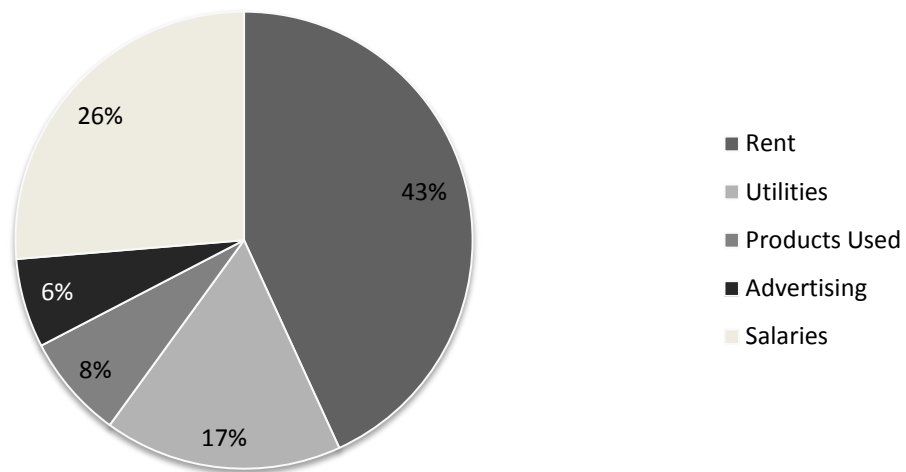
- a.  $E < 7c$
- b.  $E > 7c$
- c.  $E \leq 7c$
- d.  $E \geq 7c$

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- (E) compare economic and accounting principles and practices when providing personal care services to promote business success and growth.

**Question 7.** Analyze the chart below.

### Salon Costs



If rent is the largest cost to the salon at \$2,078 a month, what is the salon's monthly budget?

- a. \$4,538.67
- b. \$4,832.56
- c. \$5,174.54
- d. \$5,589.77

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**Question 8.** Using the information from #7, how much money is spent on products used?

- a. \$298.40
- b. \$344.48
- c. \$386.60
- d. \$496.44

(4) The student describes the function and application of the tools, equipment, technologies, and materials used in cosmetology. The student is expected to:

(B) research client information to attract new clientele and retain present clientele.

**Question 9.** Natalie wants to advertise her salon in the local phone book and in the newspaper. If the newspaper ad costs \$400 per year and the subscription is \$15 per month, what will her total newspaper bill be for one year?

- a. \$415
- b. \$430
- c. \$580
- d. \$780

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**Question 10.** Kate rents a salon space that costs \$100 per month and 20% of her profits, ( $p$ ). Which equation could Kate use to find her net salary, ( $n$ ), at the end of each month?

- a.  $n = .8p - 100$
- b.  $n = 100p + 20$
- c.  $p = .2n + 100$
- d.  $n = .2p + 100$

# Answer Key

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- 1) D
- 2) C
- 3) C
- 4) D
- 5) A
- 6) B
- 7) B
- 8) C
- 9) C
- 10) A