All math problems address TEKS 130.247. Child Development.

(1) The student analyzes roles and responsibilities of parenting. The student is expected to:

   (A) investigate parenting skills and responsibilities, including child support and other legal rights and responsibilities that come with parenthood.

**Question 1.** Noah makes $2,800 a month. He is court-ordered to give 35% of his paycheck each month as child support. If he keeps the same job for 18 years with no raise, how much total will he pay in child support over 18 years?

a. $ 11,760  
b. $ 17,640  
c. $164,260  
d. $211,680
(1) The student analyzes roles and responsibilities of parenting. The student is expected to:

(A) investigate parenting skills and responsibilities, including child support and other legal rights and responsibilities that come with parenthood.

**Question 2.** Tim and Caitlin are preparing to get married. Caitlin has a car payment of $300 per month, which is 10% of her monthly income. After they are married, Caitlin knows that her car payment will only be 6% of their combined monthly income. How much money does Tim make per month?

a. $2,000  
b. $3,000  
c. $4,000  
d. $5,000

(1) The student analyzes roles and responsibilities of parenting. The student is expected to:

(B) analyze relationship skills, including money management, communication skills, and marriage preparation.

**Question 3.** Using the Punnett square model of genetic prediction, Mr. and Mrs. Cooper want to know the chances of their baby having blue eyes. Mr. Cooper has brown eyes with one dominant brown eye gene and one recessive blue eye gene, and Mrs. Cooper has blue eyes with two recessive blue eye genes. What is the probability of their baby having blue eyes?

a. 0%  
b. 25%  
c. 50%  
d. 75%
(2) The student investigates components of optimal prenatal care and development. The student is expected to:

(B) analyze environment and hereditary factors affecting fetal development such as Mendel's Law of inheritance, genetics, and substances and how they affect the developing child and prenatal brain development.

**Question 4.** Irene’s water just broke and she is on her way to the hospital. When she arrives, doctors tell her she is dilated to 5 centimeters. She must reach 10 centimeters before she can deliver her baby. If her dilation increases .5 centimeters every hour and she arrived at the hospital at 3 AM, when can she expect to deliver her baby?

a. 8 AM  
b. 1 PM  
c. 8 PM  
d. 1 AM  

(2) The student investigates components of optimal prenatal care and development. The student is expected to:

(F) analyze the process of labor and delivery.

**Question 5.** Yolanda just had her second child. She was paying $980 per month for one child in daycare. She gets a discounted rate for putting a second child in daycare. If her new total is $1,475 per month, about how much of a discount is she receiving on her second child’s daycare cost?

a. 40%  
b. 50%  
c. 60%  
d. 70%
(3) The student investigates strategies for optimizing the development of infants of diverse backgrounds, including those with special needs. The student is expected to:

(B) generate ideas to gather information relevant to care and protection of infants such as child care options, abuse, guidance, services and agencies, immunizations, and appropriate health care.

**Question 6.** Analyze the graph below.

Which of the following statements is a reasonable conclusion from the graph?

a. Having one child is just as expensive as having three children.
b. People with no children make more money than people with children.
c. People with three children spend more money on food.
d. People with three children have around $400 in expendable income.
(3) The student investigates strategies for optimizing the development of infants of diverse backgrounds, including those with special needs. The student is expected to:

(C) draw conclusions regarding the impact of the infant on the family in areas such as roles, finances, responsibilities, and relationships.

**Question 7.** Infants need to receive 30 minutes of touch every three hours during the first year of life in order to develop healthy attachments. Approximately how many days of physical touch does this accumulate to over the year?

a. 30 days  
b. 60 days  
c. 90 days  
d. 120 days

(3) The student investigates strategies for optimizing the development of infants of diverse backgrounds, including those with special needs. The student is expected to:

(D) identify typical growth and development of infants such as brain development and mental health.

**Question 8.** Infants should not have more than 20 grams of complex sugars per day, such as in juice drinks. If one juice drink has 12 grams of sugar, what percentage of their daily allotted value is in one juice drink?

a. 50%  
b. 60%  
c. 70%  
d. 80
(3) The student investigates strategies for optimizing the development of infants of diverse backgrounds, including those with special needs. The student is expected to:

(E) select and use appropriate standard international units to identify nutritional needs for infants such as caloric requirements, protein, lipids, carbohydrates, and portion control.

**Question 9.** Mya heard that adult height can be estimated by doubling a child’s height at age 2. What is her child’s estimated adult height if at age 2 he is 32 inches tall?

a. 5 feet tall  
b. 5 feet 2 inches tall  
c. 5 feet 4 inches tall  
d. 6 feet 4 inches tall

(4) The student investigates strategies for optimizing the development of toddlers of diverse backgrounds, including those with special needs. The student is expected to:

(C) identify patterns of typical growth and development of toddlers.

**Question: 10.** Mya’s son mentioned above in question has now reached his adult height of 5 feet 8 inches tall. What is the percentage difference from his predicted height?

a. 6%  
b. 8%  
c. 10%  
d. 12%


Answer Key

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