Lessons 7.5–7.6

MULTIPLE CHOICE

1. **PAINT** You are painting a room and spend $120 on 4 cans of yellow paint and 2 cans of white paint. You decide to paint another room using the same colors, and you spend $60 for 2 cans of yellow paint and 1 can of white paint. How much does one can of each color of paint cost? *TEKS A.8.A*

   (A) yellow: $10, white: $30

   (B) yellow: $20, white: $20

   (C) yellow: $30, white: $10

   (D) The cost cannot be determined.

2. **SUMMER JOBS** During the summer, you want to earn at least $250 per week. You earn $10 per hour working as a lifeguard, and you earn $8 per hour working at a retail store. You can work at most 30 hours per week. Suppose you are scheduled to work at the retail store for 10 hours per week. Which inequality gives the range of hours x you must work as a lifeguard to meet your goal? *TEKS A.8.A*

   (F) $x \geq 20$ (G) $10 \leq x \leq 20$

   (H) $15 \leq x \leq 20$ (J) $17 \leq x \leq 20$

3. **POPULATION** The table shows the current population and rate of growth for four towns. You want to use the data to predict when each pair of towns will have the same population. For which pair of towns will this *not* occur? *TEKS A.7.A*

Town	Population (people)	Rate of growth (people per year)
Baker	12,000	1,800
Lincoln	18,000	1,400
Riverton	20,000	1,400
Thorton	24,000	1,200

   (A) Baker and Thorton

   (B) Baker and Riverton

   (C) Lincoln and Riverton

   (D) Lincoln and Thorton

4. **CONSTRUCTION** A minimum of 600 bricks and 12 bags of sand are needed for a construction job. Each brick weighs 2 pounds, and each bag of sand weighs 50 pounds. The maximum weight that a delivery truck can carry is 2000 pounds. Which amount of bricks and sand cannot be delivered by the truck in one load? *TEKS A.8.A*

   (F) 600 bricks, 15 bags of sand

   (G) 650 bricks, 14 bags of sand

   (H) 750 bricks, 10 bags of sand

   (J) 700 bricks, 13 bags of sand

5. **MUSIC** During a sale at a music store, all CDs are priced the same and all music videos on DVD are priced the same. Tyler buys 4 CDs and 2 DVDs for $78. The next day, while the sale is still in progress, Tyler goes back and buys 2 CDs and 1 DVD. What is the cost (in dollars) of his second purchase? *TEKS A.8.A*

   (A) $26   (B) $34

   (C) $39   (D) $52

GRIDDED ANSWER ⓪ ① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

6. **BUS** A bus departs from a bus station at 9 A.M. and travels at an average rate of 24 miles per hour on its 50 mile route. Another bus traveling on the same route departs from the same bus station 15 minutes later. This bus travels at an average rate of 20 miles per hour. At 9:30 A.M., how many miles behind the first bus is the second bus? *TEKS A.7.A*

7. **GARDEN** What is the area (in square units) of the rectangular garden defined by the following system of inequalities? *TEKS A.5.C*

   $x \geq -2$
   $x \leq 6$
   $y \geq -2$
   $y \leq 4$