# MIXED REVIEW FOR TEKS

TAKS PRACTICE
classzone.com

## Lessons 6.1–6.4

### MULTIPLE CHOICE

1. **SPORTING GOODS** You have a $150 gift card to use at a sporting goods store. You buy 2 pairs of shoes for $65 each. You plan to spend the rest of the money on socks. Socks cost $4.75 per pair. Of all the possible numbers of pairs of socks that you can buy, which is the greatest number? *TEKS A.7.A*

   (A) 2 pairs (B) 4 pairs
   (C) 5 pairs (D) 8 pairs

2. **SCIENCE TESTS** On the five science tests you have taken this semester, you received the following scores: 75, 82, 90, 84, and 71. You want an average score of at least 80 after you take the sixth test. Which inequality describes the possible scores $s$ you can earn on your sixth test to meet your goal? *TEKS A.7.A*

   (F) $s > 76$ (G) $s \geq 78$
   (H) $s > 78$ (J) $s \geq 80$

3. **NANOTUBE THERMOMETER** A nanotube thermometer is so tiny that it is invisible to the human eye. The thermometer can measure temperatures from 50°C to 500°C. Which temperature could the nanotube thermometer measure? *TEKS A.7.B*

   (A) 55°F (B) 105°F
   (C) 700°F (D) 1450°F

4. **MODELING** Which situation can be modeled by the inequality $17x \leq 240$? *TEKS A.5.A*

   (F) A store sells 17 CDs for $240. Each CD costs $x$ dollars.

   (G) A customer has $240 and wants to buy at least 17 books. Each book costs $x$ dollars.

   (H) A business purchases 17 items for $x$ dollars each. The business can spend no more than $240.

   (J) You save $x$ dollars every week in order to buy a bike that costs $240. After 17 weeks, you still cannot afford the bike.

5. **RAFTING TRIP** A rafting guide plans to take 6 children on a rafting trip. The raft can hold up to 550 pounds. The guide weighs 160 pounds and estimates that each child will bring 5 pounds of baggage. Which inequality describes the possible average weight $w$ (in pounds) of the children? *TEKS A.7.A*

   (A) $w \leq 55$ (B) $w \leq 60$
   (C) $w \leq 64.18$ (D) $w \leq 91.67$

6. **INCOME TAX** In 1862 the United States imposed a tax on annual income in order to pay for the expenses of the Civil War. The table shows the tax rates for different incomes. Which compound inequality describes the possible incomes of $x$ dollars for which the tax was between $450 and $600? *TEKS A.7.A*

| Annual income | Tax rate |
|---|---|
| $600 to $10,000 | 3% of income |
| Greater than $10,000 | 3% of first $10,000 plus 5% of income over $10,000 |

   (F) $3{,}000 \leq x \leq 6{,}000$
   (G) $9{,}000 \leq x \leq 12{,}000$
   (H) $13{,}000 \leq x \leq 16{,}000$
   (J) $15{,}000 \leq x \leq 20{,}000$

### GRIDDED ANSWER

7. **BAKE SALE** You need 34 eggs to make enough chiffon cakes for a bake sale. Your grocer sells cartons of eggs by the dozen. Of all the possible numbers of cartons that you can buy, what is the least number that you need? *TEKS A.7.A*

8. **PIZZA PARTY** At a party, 1 large pizza is enough to feed 3 people. You plan to have 13 people at your party and want to have enough large pizzas to feed everybody. Of all the possible numbers of large pizzas that you can buy, what is the least number that you need? *TEKS A.7.A*