

CA Algebra 1 Standard 5.0

MULTIPLE CHOICE

1. Solve: $10x - 4 = 5x + 11 + 2x$
Step 1: $10x - 4 = 7x + 11$
Step 2: $3x - 4 = 11$
Step 3: $3x = 7$
Step 4: $x = \frac{7}{4}$

Which is the first *incorrect* step in the solution shown above?

- A. Step 1
B. Step 2
C. Step 3
D. Step 4
2. The cost of a jet ski lesson on Madeira Beach can be calculated using the equation $c = 40h + 100$, where c represents the cost of the lesson and h represents the total amount of hours of the lesson. What is the cost of a five-hour jet ski lesson?
- A. \$140
B. \$200
C. \$300
D. \$505
3. Which inequality can be used to solve the following problem?

Mona rented a car for \$175 per week plus \$0.25 per mile.
How far did Mona travel if she spent at most \$350

- A. $175 + 0.25m \leq 350$
B. $175 + 0.25m \geq 350$
C. $175 + 350 \leq 0.25m$
D. $350 + 0.25m \leq 175$
4. Greg wants to rent a small tractor. He is trying to decide which rental company to use. Each company figures the cost on the number of hours the tractor is rented plus a delivery fee. For both companies, c represents the cost and t represents the time, in hours, of the rental.

Lone Star Rentals: $c = 5t + 35$
Canyon Farm Rentals: $c = 4t + 40$

For how many hours of rental will the costs of both rental companies be equal?

- A. 2
B. 3
C. 4
D. 5

5. The selling price of a certain CD is \$9 more than the price the store paid the manufacturing company. If the selling price is \$32, which equation can be used to find the price, p , the store paid the manufacturing company?

A. $p + 9 = 32$
B. $p + 32 = 9$

C. $p - 9 = 32$
D. $9 - p = 32$

6. Solve: $4x + 2(x - 6) = 30$
Step 1: $4x + 2x - 6 = 30$
Step 2: $6x - 6 = 30$
Step 3: $6x = 30$
Step 4: $x = 5$

Which is the first *incorrect* step in the solution shown above?

- A. Step 1
B. Step 2

- C. Step 3
D. Step 4

7. A company uses an equation to determine shipping costs for their orders. In the equation $s = \$2.50p + \1.25 , s represents the total shipping cost for an order that weighs p pounds. Which of the following shows an accurate shipping cost for the weight given?

- A. 3 pounds for \$7.50
B. 2.25 pounds for \$6.00

- C. 2 pounds for \$6.25
D. 5 pounds for \$1.50

8. Solve: $11x - 9 = 5x - 12x + 19$
Step 1: $11x - 9 = -7x + 19$
Step 2: $11x = -7x + 28$
Step 3: $4x = 28$
Step 4: $x = 7$

Which is the first *incorrect* step in the solution shown above?

- A. Step 1
B. Step 2

- C. Step 3
D. Step 4

9. At a certain store, audiotapes cost \$5.00 per package and videotapes cost \$10.00 per package. Which inequality best describes the number of packages of audiotapes, a , and the number of packages of videotapes, v , that can be purchased for \$45.00 or less?

- A. $10a + 5 \leq 45$
B. $5a + 10v \leq 45$

- C. $5a + 10v < 45$
D. $10a + 5v < 45$

10. The first of two movies lasted 8 minutes less than three times as long as the second. Together the two movies lasted 156 minutes. How long was the second movie?

- A. 39 minutes
B. 41 minutes

- C. 43 minutes
D. 52 minutes