4.OA.1.C1 Interpret a multiplication equation as a comparison

Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. Jody had two jobs last weekend; cleaning the garage and mowing the lawn.   She earned $40 for cleaning the garage. Forty dollars is five times more than what Jody earned mowing the lawn. Which multiplication equation represents the comparison between what Jody earned for her two weekend jobs?
   a. $40 = 5 X $8
   b. $40 = 5 X $9
   c. $40 = 2 X $20
   d. $40 X 5 = $200

2. Lydia is making beaded necklaces and bracelets for her friends. A necklace takes four times more beads than a bracelet. If it takes 56 beads to make a bracelet, how many beads will it take to make a necklace?
   a.   60 beads
   b.   56 beads
   c.   14 beads
   d.   224 beads

3. The student council is selling popcorn after school. On Tuesday, $93 was earned selling popcorn. If Tuesday's popcorn profit was three times greater than Monday's popcorn profit, how much profit was made on Monday?
   a. $3
   b. $31
   c. $60
   d. $50

Multiple Response
Identify one or more choices that best complete the statement or answer the question.

4. Jaren's basketball team played in a tournament last week. Jaren scored 7 points in the first game and 4 points in the second game. In the third game, Jaren scored twice as many points as he scored in the first and second game combined. Which two responses correctly represent the comparison between Jaren's combined points scored in the first two games and the points Jaren scored in the third game?
   a.   11 + 2 = 13
   b.   2 X 4 X 7 = 56
   c.   Jaren scored 22 points in the third game because 22 points is twice as many points as the11 points scored in the first two games.
   d.   2 X (7 + 4) = 22

5. Jane's family is going on a vacation to Yellowstone National Park. Last summer, her family spent $150 on gasoline for the car. This year it will cost them three times more to buy gasoline for the car. Which two responses correctly represent the comparison between what they spent last year and what they will spend this year?
   a. $150 X 3 = $450
   b.   3 X $150 = $650
   c.   3 X $50 =$150
   d.   Jane's family will spend $450 for

gasoline this year because 3 times $150 is $450.

6. On Friday, students choose an afternoon activity. Fourteen students chose to play basketball in the gym. Three times that many students chose to play soccer outside. Which two responses correctly represent the comparison between students playing basketball and students playing soccer?

   a. $14 + 3 = 17$ c.   Forty-two students are playing soccer because 14 times 3 equals 42.

   b. $14 \times 3 = 42$ d. $14 \times 3 = 32$

7. Anna collects baseball cards. She has 96 New York Yankee baseball cards. She has 12 Colorado Rockies baseball cards. Which three responses correctly represent the comparison between the number of her Yankee cards and Rockies cards?

   a. $96 \times 12 = 972$ c.   Anna has 8 times more Yankee cards than Rockies cards

   b. $8 \times 12 = 96$ d. $12 \times 8 = 96$

8. William is 15 years old. His grandfather is 5 times older than William. Which three responses correctly represent the comparison between William's age and his grandfather's age?

   a. $5 \times 15 = 75$ c.   Grandfather is 75 years old because 75 is 5 times older than 15.

   b. $5 \times 5 = 25$ d.   Grandfather is 75 years old because 75 is 5 times older than 15.

9. Carol has two dogs. Her small dog weighs 15 pounds. Her large dog weighs 60 pounds. Carol's large dog weighs 4 times more that her small dog. Pick three answers that correctly represent the comparison between the weights of the two dogs.

   a.   Carol's large dog weighs 4 times more than the small dog.   c. $60 \times 4 = 240$

   b.   Sixty is 4 times more than 15.   d. $15 \times 4 = 60$

10. Tomato plants in the garden grew to 24 inches tall. Sunflower plant grew to 144 inches tall. How many times taller were the sunflower plants than the tomato plants?

   a.   Sunflower plants were four times taller than the tomato plants.   c.   Sunflower plants were five times taller than the tomato plants.

   b.   Sunflower plants were ten times taller than the tomato plants.   d.   Sunflower plants were six times taller than the tomato plants.

Answer 1: A
Answer 2: D
Answer 3: B
Answer 4: C
Answer 5: D
Answer 6: C
Answer 7: B, C, D
Answer 8: A, C, D
Answer 9: A, B, D
Answer 10: D