

CHAPTER-6 | ALGEBRA PLAY

QUIZ
PART-08

1. In an algebra grid, the last column of each row represents:
- Difference of values
 - Product of values
 - Sum of values to its left
 - Average of values

Explanation: The chapter states that the last column is the sum of the values to its left.

2. If three identical shapes add up to 27, the value of each shape is:
- 7
 - 8
 - 9
 - 10

Explanation: $27 \div 3 = 9$.

3. If two identical shapes and 9 add up to 19, the value of each identical shape is:
- 4
 - 5
 - 6
 - 7

Explanation: $2x + 9 = 19 \Rightarrow 2x = 10 \Rightarrow x = 5$.

4. Which mathematical operation is mainly used to find unknown shape values?
- Algebraic equations
 - Geometry
 - Measurement
 - Probability

Explanation: Unknown shapes are treated as variables and solved using equations.

5. In the assessment grid, let the circle be C and the diamond be D. The first row gives:
- $C + D = 22$
 - $C + 2D = 22$
 - $2C + D = 22$
 - $2C + 2D = 22$

Explanation: The first row contains one circle and two diamonds with total 22.

6. The second row of the assessment grid gives:

- $D + 2C = 20$
- $2D + C = 20$
- $D + C = 20$
- $2D + 2C = 20$

Explanation: The second row contains one diamond and two circles with total 20.

7. By subtracting the second-row equation from the first-row equation, we get:

- $C - D = 2$
- $D - C = 2$
- $D + C = 2$
- $D - C = 4$

Explanation: $(C + 2D) - (D + 2C) = 22 - 20 \Rightarrow D - C = 2$.

8. If $D - C = 2$ and $D + 2C = 20$, the value of the circle is:
- 5
 - 6
 - 7
 - 8

Explanation: $D = C + 2$; substituting gives $3C + 2 = 20 \Rightarrow C = 6$.

9. The value of the diamond in the assessment grid is:

- 6
- 7
- 8
- 9

Explanation: Since $C = 6$ and $D = C + 2$, $D = 8$.

10. What is the total of the third row (diamond + circle + circle)?

- 18
- 19
- 1420
- 22

Explanation: $8 + 6 + 6 = 20$.