

Chapter – 6 | ALGEBRA PLAY

QUIZ-01

1. In the number trick, if the original number is x , double of it is:

A. $x + 2$
B. $2x$
C. $x/2$
D. $x - 2$ (B)

Explanation : Doubling means multiplying by 2.

2. The final answer of the trick "double, add 4, divide by 2, subtract original number" is:

A. 1
B. 2
C. 3
D. 4 (B)

Explanation : x becomes $x + 2$, and subtracting x gives 2.

3. In the date trick, after the final answer is given, we subtract:

A. 100
B. 125
C. 165
D. 200 (C)

Explanation : The expression becomes $100M + 165 + D$.

4. In a number pyramid, each number is:

A. Difference of two numbers below
B. Product of two numbers below
C. Sum of two numbers below
D. Division of two numbers below (C)

Explanation : Each upper block is made by adding the two blocks below it.

5. For bottom row a, b, c in a 3-row pyramid, the top is:

A. $a + b + c$
B. $a + 2b + c$
C. $2a + b + c$
D. $a + b + 2c$ (B)

Explanation : Top = $(a + b) + (b + c) = a + 2b + c$.

6. In a 2×2 calendar grid, if top-left number is a , bottom-right number is:

A. $a + 1$
B. $a + 7$
C. $a + 8$
D. $a + 16$ (C)

Explanation : Bottom-right is one day right and one week below, so $a + 8$.

7. The sum of a 2×2 calendar grid is:

A. $2a + 16$
B. $4a + 16$
C. $4a + 8$
D. $a + 16$ (B)

Explanation : $a + (a + 1) + (a + 7) + (a + 8) = 4a + 16$.

8. To make the largest product using digits 2, 3, and 5, the correct product is:

A. 23×5
B. 52×3
C. 53×2
D. 32×5 (D)

Explanation : $32 \times 5 = 160$, which is the largest product.

9. In the largest product rule, the largest digit should be used as:

A. Tens digit
B. Ones digit
C. Multiplier
D. Difference (C)

Explanation : The largest digit is used as the multiplier.

10. The difference between a 2-digit number and its reverse is always divisible by:

A. 2
B. 5
C. 9
D. 10 (C)

Explanation : $(10b + a) - (10a + b) = 9(b - a)$, so it is divisible by 9.