

CHAPTER-3 | Proportional Reasoning-2

QUIZ
PART-06

1. The grade distribution shown in the pie chart is for a total of:

A. 30 students
B. 35 students
C. 40 students
D. 50 students (C)

Explanation : The pie chart represents the grades of 40 students.

2. How many students received Grade A?

A. 8
B. 10
C. 12
D. 14 (C)

Explanation: The table shows that 12 students received Grade A.

3. The ratio of students with Grade A to Grade B is:

A. 5 : 6
B. 6 : 5
C. 3 : 2
D. 2 : 3 (B)

Explanation: Grade A = 12 and Grade B = 10, so the ratio is $12 : 10 = 6 : 5$.

4. Which grade has the fewest students?

A. A
B. B
C. D
D. E (D)

Explanation: Grade E has only 4 students, the smallest number in the table.

5. The ratio $12 : 10 : 8 : 6 : 4$ can be simplified to:

A. $6 : 5 : 4 : 3 : 2$
B. $3 : 2 : 1 : 1 : 1$
C. $12 : 5 : 4 : 3 : 2$
D. $4 : 3 : 2 : 1 : 1$ (A)

Explanation : Dividing each term by 2 gives $6 : 5 : 4 : 3 : 2$.

6. The central angle for Grade A in the pie chart is:

A. 72°
B. 90°
C. 108°
D. 120° (C)

Explanation : Grade A represents $12/40$ of the circle.
 $(12/40) \times 360^\circ = 108^\circ$.

7. The central angle for Grade B is:

A. 72°
B. 90°
C. 108°
D. 54° (B)

Explanation : Grade B represents $10/40$ of the students. $(10/40) \times 360^\circ = 90^\circ$.

8. The central angle for Grade E is:

A. 36°
B. 54°
C. 72°
D. 108° (A)

Explanation : Grade E represents $4/40$ of the students. $(4/40) \times 360^\circ = 36^\circ$.

9. A pie chart represents data using:

A. Bars
B. Line segments
C. Circular sectors
D. Rectangles (C)

Explanation : A pie chart divides a circle into sectors according to the data values.

10. The sum of all central angles in a pie chart is:

A. 180°
B. 270°
C. 360°
D. 540° (C)

Explanation : A pie chart is a complete circle, and a circle contains 360° .