

CLASS - VI

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|-----|---|------|---|------|---|------|---|------|---|------|----------|
| 01) | B | (11) | C | (21) | D | (31) | C | (41) | D | (51) | 43 |
| 02) | C | (12) | B | (22) | B | (32) | B | (42) | D | (52) | 55 |
| 03) | B | (13) | C | (23) | A | (33) | D | (43) | B | (53) | 56 |
| 04) | C | (14) | A | (24) | A | (34) | D | (44) | C | (54) | 64 |
| 05) | D | (15) | B | (25) | B | (35) | D | (45) | C | (55) | Saturday |
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| 06) | C | (16) | D | (26) | C | (36) | D | (46) | B | (56) | 120° |
| 07) | D | (17) | D | (27) | C | (37) | C | (47) | D | (57) | 44 |
| 08) | C | (18) | C | (28) | D | (38) | C | (48) | C | (58) | 4 km |
| 09) | A | (19) | A | (29) | A | (39) | D | (49) | C | (59) | 0 |
| 10) | B | (20) | A | (30) | C | (40) | B | (50) | A | (60) | 40 |

- 01) B) 510056
 02) C) C
 03) B) a = 5, b = 6
 04) C) 48000
 05) D) a < 0, b ≠ -4
 06) C) 1 : 49 Defective = 1/50, non-defective 1 - 1/50 = 49/50; ratio = 1 : 49
 07) D) 5 distance = speed X time
 08) C) 6 three pizzas -> four members ; three pizzas -> three members + one member
 09) A) 75 angle C = (5/12) X 180 = 75
 10) B) 312500 profit = 25 % of 5000000 = 1250000; each got = one-fourth of 1250000 = 312500
 11) C)



- 12) B) 0
 13) C) $\frac{1}{2} - 3(a + 2) = 3(a - 3)$; $-3a - 6 = 3a - 9$; $6a = 3$; $a = \frac{1}{2}$
 14) A) LV . LV = 55 x 55 = 3025 = MMMXXV
 15) B) 90
 16) D) none a = 0
 17) D) $2 \frac{3}{5}$ of 30 - $\frac{2}{5}$ of 40 = 18 - 16 = 2

18) C) $\frac{q^2 - p^2}{2p}$; $\frac{p+q+x}{p-q+x} = \frac{(p+q)^2}{(p-q)^2}$ -----> (1) add 1 on both sides of (1); subtract 1 on both sides
 (1) and divide the resulting two equations and proceed.

- 19) A) x+y+z
 20) A) 0°
 21) D) 1
 22) B) $\frac{3}{4}$ x = 3; y = 4
 23) A) 2 10 % of m = 30 % of n -----> $m/10 = 3n/10$ -----> $m = 3n$ -----> $(m+n)/(m-n) = 2$
 24) A) B > 150
 25) B) x < 10/3
 26) C) 4 $2.022 = 2 + \frac{022}{1000} = 2 \frac{22}{1000} \Rightarrow P + Q + R = 2 + 22 + 1000 = 1024 = 4^{4+1}$

- 27) C) 60 ; $\frac{3}{4}x - \frac{2}{5}x = 21 \Rightarrow \frac{7x}{20} = 21 \Rightarrow x = 60$ 28) D) $n - m - 1$
- 29) A) $1 : 2\ 00\ 000$; $1\ \text{cm} = 2\ \text{km} = 2\ 00\ 000\ \text{cm}$ 30) C) $x = 3.2, y = 2.3$
- 31) C) $157\frac{1}{2}^{\circ}$; $90^{\circ} + 45^{\circ} + 22\frac{1}{2}^{\circ}$
- 32) B) $-y$; $\frac{1}{5}(2AB - 3BC) = \frac{1}{5}(6x + 4y - 6x - 9y) = -y$
- 33) D) 1
- 34) D) -110 $2x + x - 5 + 4x - 20 + 3x + 35 = 360 \Rightarrow x = 35$; difference = $140 - 30 = 110$
- 35) D) $a = b + \frac{bx}{100}$
- 36) D) $48 \frac{x+x+2+x+4}{3} = 4 \Rightarrow x = 2 \Rightarrow 2.4.6 = 48$
- 37) C) 18 years; $5(x - 8) = x + 32 \Rightarrow x = 18$
- 38) C) $4 : 11$; $\frac{3x+2y}{9x+5y} = \frac{y(\frac{3x}{y}+2)}{y(\frac{9x}{y}+5)} = \frac{(3 \times \frac{2}{3} + 2)}{(9 \times \frac{2}{3} + 5)} = \frac{4}{11}$
- 39) D) $l \parallel m \parallel q$
- 40) B) $105, 75$; $2x - 5 + x + 20 = 180 \Rightarrow x = 55$, angles are $105, 75$
- 41) D) 48 sq cms. $2(l + b) = 40 \Rightarrow l + b = 20 \Rightarrow b = 8 \Rightarrow$ area of triangle = half of area of rectangle = $(1/2)12 \times 8 = 48$
- 42) D) 26 A C B
- 43) B) 90 one-fourth of 360
- 44) C) line segment 45) C) is to 46) B) 2
- 47) D) Data wrong
- 48) C) $90 - 270$; $0 < A < 90$; $90 < B < 180 \Rightarrow 90 < A + B < 270$
- 49) C) Integers 50) A) $22-12-1887$
- 51) 43 ; adding prime numbers in sequence
- 52) 55 ; add multiples of 5
- 53) 56 ; all others are multiples of 3
- 54) 64% $\left(x \times \frac{80}{100}\right) \frac{80}{100} = 64\%$
- 55) Saturday
- 56) 120
- 57) 44 ; $(8.5 - 1.5 - 1.5)(11 - 1.5 - 1.5) = 5.5 \times 8 = 44$
- 58) $4\ \text{km}$
- 59) 0 60) 40 $\frac{4}{5}x = 64 \Rightarrow x = 80$ then half the number is 40