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| S.No | Solution | Marks |
| 1 | Infinitely many | 1 |
| 2 | 0 | 1 |
| 3 | 4 | 1 |
| 4 | X | 1 |
| 5 | 52=25  62=36  72 =49  Ans:-36 | 1  1 |
| 6 | 992=(100-1)2  =1002+12-200  =10001-200  =9801 | 1  1 |
| 7 | Area of quadrilateral=1/2(13+8)x24  =252m2 | 1  1 |
| 8 | Surface area of cube=6(10)2 cm2  =600 cm2 | 1  1 |
| 9 | A=2  B=5 | 1  1 |
| 10 | 2+1+Y+5=9  8+Y=9  Y=1 | 1  1/2  1/2 |
| 11 | Correct location of 7/4 and -3/4 | 1 each |
| 12 | 1008=24 x32 x7  It should be multiplied by 7 | 2  1 |
| 13 | =1.6  By appropriate method | 3 |
| 14 | 1. (1+) x 4   =x 4 =5  (b)1.524 x 107 | 1    1 |
| 15 | (a)(2p)2 – (3q)2  = (2p+3q)(2p-3q)  (b)p2-5p-5p+ 25  =(p-5)(p-5) | 1    1 |
| 16 | Correct graph  Yes it is linear | 2  1 |
| 17 | 1. Correct information 2. 140-145 3. (125-130 and 155-160 )and(130-135 and150-155) | 1  1  1 |
| 18 | 1. & (b) for correct view | each |
| 19 | and  and  …….  Give full marks for correct alternate method | 1  1  2 |
| 20 | X=0  LHS = 4  RHS =4 | 2  1  1 |
| 21 | Let unit place digit = x  Then tens place digit = 9-x  Correct original number = 90-9x  Correct number on interchanging the digits =9x+9  Correct answer = 36  OR  Let the number of five-rupee coins that Bansi has be *x.* Then the number of  two-rupee coins he has is 3 times *x* or 3*x*.  Hence the total money =5x + 6x = Rs 11*x*  11*x* = 77  or *x* = 77/11 = 7  Thus, number of five-rupee coins = *x* = 7  and number of two-rupee coins = 3*x* = 21 | 1  1  2  1  1  1  1 |
| 22 | (4x)2+(5+1)4x+5×1  16x2+24x+5  OR  (xyz)2 + (-4-2)xyz + 8  X2y2z2 – 6xyz + 8 | 1  1  1  1 |
| 23 | r= 7 m and h=3m  TSA = 2πr(h+r)  = 2××7 (7+3)  = 440 m2 | 3  1 |
| 24 | 4 | 4 |
| 25 | X = 700 bottles | 3  1 |
| 26 | Inverse Proportion   |  |  |  | | --- | --- | --- | | children | 24 | 20 | | Sweets per child | 5 | y |   Therefore ,24 x 5 =20 x y  Or y=6  Each will get 6 sweets | 1  2  1 |
| 27 | =  =(y+2) | 3  1 |
| 28 | Writing Euler’s formula, F+V-E=2  9+9-16=2  18-16=2  2=2  Hence verified | 1  3 |
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