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| Division | 11 |
| Subject | Maths |
| Chapter |  |
| Category | Very Easy |
| No of mcq | 10 |
| Author | Auto Scrapper |

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| Find midpoint of (1, 4, 6) and (5, 8, 10). |
| (6, 12, 8) |
| (3, 6, 8) |
| (1, 9, 12) |
| (4, 9, 12) |
| 2 |
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| We know, midpoint of (x1, y1, z1) and (x2, y2, z2) is (x1+x2) /2, (y1+y2) /2, (z1+z2)/2). So, midpoint of (1, 4, 6) and (5, 8, 10) is ((1+5)/ 2, (4+8)/ 2, (6+10)/2) is (3, 6, 8). |
| Three Dimensional Geometry – Section Formula |

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| The coordinates of a point dividing the line segment joining (1, 2, 3) and (4, 5, 6) internally in the ratio 2:1 is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| (3, 4, 5) |
| (5, 4, 3) |
| (5, 3, 4) |
| (4, 5, 3) |
| 1 |
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| The coordinates of a point dividing the line segment joining and internally in the ratio is .  So, the coordinates of a point dividing the line segment joining and internally in the ratio is |
| Three Dimensional Geometry – Section Formula |

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| In which ratio (3, 4, 5) divides the line segment joining (1, 2, 3) and (4, 5, 6) internally? |
| 1:2 |
| 2:1 |
| 3:4 |
| 4:3 |
| 2 |
|  |
| The coordinates of a point dividing the line segment joining and internally in the ratio : is .  Let the ratio be , the coordinates of a point dividing the line segment joining , 3 ) and internally in the ratio is   is same as .  So, ratio is . |
| Three Dimensional Geometry – Section Formula |

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| The coordinates of a point dividing the line segment joining (1, 2, 3) and (4, 5, 6) externally in the ratio 2:1 is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| (4, 5, 6) |
| (6, 8, 9) |
| (7, 8, 9) |
| (8, 6, 4) |
| 3 |
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| The coordinates of a point dividing the line segment joining and externally in the ratio is .  So, the coordinates of a point dividing the line segment joining and externally in the ratio is |
| Three Dimensional Geometry – Section Formula |

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| If coordinates of vertices of a triangle are (7, 6, 4), (5, 4, 6), (9, 5, 8), find the coordinates of centroid of the triangle. |
| (7, 5, 3) |
| (7, 3, 5) |
| (5, 3, 7) |
| (3, 5, 7) |
| 1 |
|  |
| If coordinates of vertices of a triangle are (x1, y1, z1), (x2, y2, z2), (x3, y3, z3) the coordinates of centroid of the triangle are ((x1+x2+x3)/3, (y1+y2+y3)/3, (z1+z2+z3)/3) So, coordinates of centroid of the given triangle are ((7+5+9)/3, (6+4+5)/3, (4+6+8)/3) = (7, 5, 3). |
| Three Dimensional Geometry – Section Formula |

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| The ratio in which line joining (1, 2, 3) and (4, 5, 6) divide X-Y plane is \_\_\_\_\_\_\_\_ |
| 2 |
| -2 |
| 1/2 |
| -1/2 |
| 4 |
|  |
| The coordinates of a point dividing the line segment joining (x1, y1, z1) and (x2, y2, z2) internally in the ratio m : n is . Let ratio be k : 1. So, z-coordinate of the point will be (k\*6+1\*3)/(k+1). We know, for X-Y plane, z coordinate is zero. (6k+1\*3)/(k+1) = 0 => k=-1/2 |
| Three Dimensional Geometry – Section Formula |

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| Find the points which trisects the line joining (4, 9, 8) and (13, 27, -4). |
| (7, 4, 15) |
| (7, 15, 4) |
| (4, 15, 7) |
| (4, 7, 15) |
| 2 |
|  |
| Points which trisect the line divides it into 2:1 and 1:2.  The coordinates of a point dividing the line segment joining and  internally in the ratio is  For , coordinates of point are  For , coordinates of point are |
| Three Dimensional Geometry – Section Formula |

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| Find the points which trisects the line joining (4, 9, 8) and (13, 27, -4). |
| (0, 21, 10) |
| (0, 21, 4) |
| (10, 21, 0) |
| (4, 4, 0) |
| 3 |
|  |
| Points which trisect the line divides it into 2:1 and 1:2.  The coordinates of a point dividing the line segment joining and internally in the ratio is .  For , coordinates of point are  For 2:1, coordinates of point are |
| Three Dimensional Geometry – Section Formula |

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| If P (2, 3, 9), Q (2, 5, 5) and R (8, 5, 3) are vertices of a triangle then find the length of median through P. |
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| 2 |
|  |
| We know, midpoint of and is . Midpoint of line is . Length of median through is distance between midpoint of and i.e. |
| Three Dimensional Geometry – Section Formula |

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| If P (2, 3, 9), Q (2, 5, 5) and R (8, 5, 3) are vertices of a triangle then find the length of median through Q. |
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| 3 |
|  |
| We know, midpoint of and is . Midpoint of line PR is . Length of median through is distance between midpoint of and i.e. |
| Three Dimensional Geometry – Section Formula |