

# Centum Preparation 100 Days plan class 12 Maths

Q.No.	DAY - 46
279	<p><b>Example 6.51</b></p> <p>Find the distance between the parallel planes <math>x + 2y - 2z + 1 = 0</math> and <math>2x + 4y - 4z + 5 = 0</math></p>
280	<p><b>Example 6.52</b></p> <p>Find the distance between the planes <math>\vec{r} \cdot (2\hat{i} - \hat{j} - 2\hat{k}) = 6</math> and <math>\vec{r} \cdot (6\hat{i} - 3\hat{j} - 6\hat{k}) = 27</math></p>
281	<p><b>Example 6.55</b></p> <p>Find the image of the point whose position vector is <math>\hat{i} + 2\hat{j} + 3\hat{k}</math> in the plane <math>\vec{r} \cdot (\hat{i} + 2\hat{j} + 4\hat{k}) = 38</math>.</p>
282	<p><b>Example 6.56</b></p> <p>Find the coordinates of the point where the straight line <math>\vec{r} = (2\hat{i} - \hat{j} + 2\hat{k}) + t(3\hat{i} + 4\hat{j} + 2\hat{k})</math> intersects the plane <math>x - y + z - 5 = 0</math>.</p>
283	<p>5. Find the equation of the plane which passes through the point <math>(3, 4, -1)</math> and is parallel to the plane <math>2x - 3y + 5z + 7 = 0</math>. Also, find the distance between the two planes.</p>
284	<p>6. Find the length of the perpendicular from the point <math>(1, -2, 3)</math> to the plane <math>x - y + z = 5</math>.</p>
285	<p>7. Find the point of intersection of the line <math>x - 1 = \frac{y}{2} = z + 1</math> with the plane <math>2x - y + 2z = 2</math>. Also, find the angle between the line and the plane.</p>
286	<p>8. Find the coordinates of the foot of the perpendicular and length of the perpendicular from the point <math>(4, 3, 2)</math> to the plane <math>x + 2y + 3z = 2</math>.</p>
<b>End of chapter 6</b>	