

Challenge Set #2

1. Find two planes π_1 and π_2 so that the line of intersection is $\ell : (x, y, z) = (-1, 2, 2) + t(1, -2, 5)$. Justify your solution.
2. Find the reflection of the point $P(3, 5, -1)$ in the mirror defined by $x - 2y + 3z - 2 = 0$.
3. Find the reflection of the point $P(-2, 1, -5)$ in the line defined by $\ell : (x, y, z) = (-1, 2, 2) + t(1, -2, 5)$.
4. On the last test, I had to ensure that the pair of lines given were either intersecting or skew. How was I able to use planes to achieve this?

Challenge Set #2

1. Find two planes π_1 and π_2 so that the line of intersection is $\ell : (x, y, z) = (-1, 2, 2) + t(1, -2, 5)$. Justify your solution.
2. Find the reflection of the point $P(3, 5, -1)$ in the mirror defined by $x - 2y + 3z - 2 = 0$.
3. Find the reflection of the point $P(-2, 1, -5)$ in the line defined by $\ell : (x, y, z) = (-1, 2, 2) + t(1, -2, 5)$.
4. On the last test, I had to ensure that the pair of lines given were either intersecting or skew. How was I able to use planes to achieve this?

Challenge Set #2

1. Find two planes π_1 and π_2 so that the line of intersection is $\ell : (x, y, z) = (-1, 2, 2) + t(1, -2, 5)$. Justify your solution.
2. Find the reflection of the point $P(3, 5, -1)$ in the mirror defined by $x - 2y + 3z - 2 = 0$.
3. Find the reflection of the point $P(-2, 1, -5)$ in the line defined by $\ell : (x, y, z) = (-1, 2, 2) + t(1, -2, 5)$.
4. On the last test, I had to ensure that the pair of lines given were either intersecting or skew. How was I able to use planes to achieve this?