Now, in order to get the lowest set of integers, it is necessary to multiply all indices by the factor 3, with the result that the direction B is a $[\bar{2}110]$ direction.

For direction C projections on the a_1, a_2, and z axes are a, a/2, and 0c, or, in terms of a and c the projections are 1, 1/2, and 0, which when multiplied by the factor 2 become the smallest set of integers: 2, 1, and 0. This means that

$u' = 2$

$v' = 1$

$w' = 0$

Now, from Equations 3.6, the u, v, t, and w indices become

$$u = \frac{1}{3}(2u' - v) = \frac{1}{3}\left[(2)(2) - 1\right] = \frac{3}{3} = 1$$

$$v = \frac{1}{3}(2v' - u') = \frac{1}{3}\left[(2)(1) - 2\right] = 0$$

$$t = -(u + v) = -\left(1 - 0\right) = -1$$

$$w = w' = 0$$

No reduction is necessary inasmuch as all the indices are integers. Therefore, direction C is a $[10\bar{1}0]$.

For direction D projections on the a_1, a_2, and z axes are a, 0a, and c/2, or, in terms of a and c the projections are 1, 0, and 1/2, which when multiplied by the factor 2 become the smallest set of integers: 2, 0, and 1. This means that

$u' = 2$

$v' = 0$

$w' = 1$

Now, from Equations 3.6, the u, v, t, and w indices become

$$u = \frac{1}{3}(2u' - v') = \frac{1}{3}\left[(2)(2) - 0\right] = \frac{4}{3}$$

$$v = \frac{1}{3}(2v' - u') = \frac{1}{3}\left[(2)(0) - (2)\right] = -\frac{2}{3}$$