#include <stdio.h>

#define inf 987654321

#define Min(a, b) ((a)<(b)?(a):(b))

int n;

int d[1050000];

void build()

{

int i;

for (i = 0; (1<<i) < n; i++);

n = (1<<i);

for (i = 1; i <= (n<<1); i++)

d[i] = inf;

}

int min\_val(int pos, int p, int q, int a, int b)

{

if (a == p && b == q)

return d[pos];

int l = (p+q)>>1;

if (b <= l)

return min\_val(pos<<1, p, l, a, b);

if (a > l)

return min\_val((p<<1)|1, l+1, q, a, b);

int u=min\_val(pos<<1, p, l, a, l);

int v=min\_val((pos<<1)|1, l+1, q, l+1, b);

return Min(u, v);

}

void update(int pos, int p, int q, int a, int v)

{

if (p == q)

{

d[pos] = v;

return;

}

int l = (p+q)>>1;

if (a <= l)

update(pos<<1, p, l, a, v);

else

update((pos<<1)|1, l+1, q, a, v);

d[pos] = Min(d[pos<<1], d[(pos<<1)|1]);

}

int a[500010], b[500010];

int main()

{

int m, s, p, i, j;

scanf("%d", &n);

for (i = 1; i <= n; i++)

{

scanf("%d", &p);

a[p] = i;

}

for (i = 1; i <= n; i++)

{

scanf("%d", &p);

b[p] = i;

}

m = n;

build();

s = 0;

for (i = 1; i <= m; i++)

{

scanf("%d", &p);

s += (min\_val(1, 1, n, 1, a[p]) > b[p]);

update(1, 1, n, a[p], b[p]);

}

printf("%d\n", s);

return 0;

}