```
a1 = 5; a2 = 11; b1 = 17; b2 = 3; c1 = 11; c2 = 5;
```

Solving

```
A = [a1 b1; a2 b2];
B = [c1 ; c2];
C = mod(A\B, 7)
```

```
C = 2×1
    0.3023
    0.5581
```

```
% Extract the Numerator
[N, D] = rat(C);
C = mod(N, 7)
```

```
C = 2×1
     6
     3
```

```
syms k

x = 7*k + C(1)
```

$$x = 7k + 6$$

```
y = 7*k + C(2)
```

$$y = 7k + 3$$

```

logical(mod(a1*x + b1*y, 7) == mod(c1, 7))
```

```
ans = logical
   1
```

```
logical(mod(a2*x + b2*y, 7) == mod(c2, 7))
```

```
ans = logical
   1
```