

Inverse[{{2, 17}, {24, 15}}, **Modulus** → 26];

... **Inverse**: $-\frac{5}{126}$ is not valid modulo 26.

Inverse[{{2, 17}, {19, 14}}, **Modulus** → 26];

{{10, 25}, {5, 20}}.{{21, 6}, {0, 17}};

{{2, 17}, {1, 6}};

{{24, 15}}.{{2, 17}, {1, 6}};

{{11, 4}};

Mod[498, 26];

Inverse[{{2, 17}, {6, 17}}, **Modulus** → 26];

... **Inverse**: $-\frac{1}{4}$ is not valid modulo 26.

Inverse[{{2, 17}, {0, 15}}, **Modulus** → 26];

... **Inverse**: $\frac{1}{2}$ is not valid modulo 26.

Inverse[{{2, 17}, {7, 24}}, **Modulus** → 26];

{{22, 5}, {25, 4}}.{{21, 6}, {12, 11}};

(*Key*)

{{2, 5}, {1, 12}};

{{24, 15}}.{{2, 5}, {1, 12}};

{{11, 14}};

Mod[300, 26];

Inverse[{{24, 15}, {19, 14}}, **Modulus** → 26];

{{12, 15}, {19, 2}}.{{24, 23}, {0, 17}};

(*Key*)

{{2, 11}, {14, 3}};

{{2, 17}}.{{2, 11}, {14, 3}};

{{8, 21}};

Mod[73, 26];

Inverse[{{24, 15}, {6, 17}}, **Modulus** → 26];

... **Inverse**: $\frac{17}{318}$ is not valid modulo 26.

Inverse[{{24, 15}, {0, 15}}, **Modulus** → 26];

... **Inverse**: $\frac{1}{24}$ is not valid modulo 26.

Inverse[{{24, 15}, {7, 24}}, **Modulus** → 26];

{{8, 21}, {15, 8}}.{{24, 23}, {12, 11}};

(*Key*)

{{2, 25}, {14, 17}};

{{2, 17}}.{{8, 21}, {15, 8}};

{{11, 22}};

Mod[178, 26];

```
Inverse[{{19, 14}, {6, 17}}, Modulus → 26];
{{19, 18}, {4, 9}}.{{0, 17}, {3, 8}};
{{2, 25}, {1, 10}};
{{2, 17}}.{{2, 25}, {1, 10}};
{{21, 12}};
Mod[220, 26];
```

```
Inverse[{{19, 14}, {0, 15}}, Modulus → 26];
{{11, 14}, {0, 7}}.{{0, 17}, {6, 11}};
(*Key*)
{{6, 3}, {16, 25}};
{{2, 17}}.{{6, 3}, {16, 25}};
{{24, 15}};
Mod[431, 26];
```

```
Inverse[{{19, 14}, {7, 24}}, Modulus → 26];
```

... Inverse: $-\frac{7}{358}$ is not valid modulo 26.

```
Inverse[{{6, 17}, {0, 15}}, Modulus → 26];
```

... Inverse: $\frac{1}{6}$ is not valid modulo 26.

```
Inverse[{{6, 17}, {7, 24}}, Modulus → 26];
{{2, 17}, {7, 20}}.{{3, 8}, {12, 11}};
(*Key*)
{{2, 21}, {1, 16}};
{{2, 17}}.{{2, 21}, {1, 16}};
{{21, 2}};
Mod[314, 26];
```

```
Inverse[{{0, 15}, {7, 24}}, Modulus → 26];
{{2, 15}, {7, 0}}.{{6, 11}, {12, 11}};
(*Key*)
{{10, 5}, {16, 25}};
{{2, 17}}.{{10, 5}, {16, 25}};
{{6, 19}};
Mod[435, 26];
```

```
In[16]:= Inverse[{{2, 17, 24, 15}, {19, 14, 6, 17}, {0, 15, 7, 24}, {24, 24, 24, 23}}, Modulus → 26]
```

```
Out[16]= {{6, 21, 20, 23}, {3, 8, 24, 1}, {15, 8, 5, 13}, {10, 10, 2, 1}}
```

```
In[17]:= {{6, 21, 20, 23}, {3, 8, 24, 1}, {15, 8, 5, 13}, {10, 10, 2, 1}}.
{{21, 6, 24, 23}, {0, 17, 3, 8}, {6, 11, 12, 11}, {24, 24, 24, 15}}
```

```
In[20]:= Mod[{{798, 1165, 999, 871}, {231, 442, 408, 412},
{657, 593, 756, 659}, {246, 276, 318, 347}}, 26]
```

```
Out[20]= {{18, 21, 11, 13}, {23, 0, 18, 22}, {7, 21, 2, 9}, {12, 16, 6, 9}}
```

```
In[34]:= (*K = {{18,21,11,13},{23,0,18,22},{7,21,2,9},{12,16,6,9}}*)
```

```
In[29]:= Mod[{{2, 17, 24, 15}}.{{18, 21, 11, 13}, {23, 0, 18, 22}, {7, 21, 2, 9}, {12, 16, 6, 9}}, 26]
```

```
Out[29]= {{21, 6, 24, 23}}
```

```
In[31]:= Inverse[{ {18, 21, 11, 13}, {23, 0, 18, 22}, {7, 21, 2, 9}, {12, 16, 6, 9}}, Modulus → 26]
```

```
Out[31]= {{8, 5, 24, 10}, {20, 5, 5, 3}, {15, 13, 15, 24}, {16, 22, 4, 3}}
```

```
In[33]:= Mod[{ {21, 6, 24, 23} }. { {8, 5, 24, 10}, {20, 5, 5, 3}, {15, 13, 15, 24}, {16, 22, 4, 3}}, 26]
```

```
Out[33]= {{2, 17, 24, 15}}
```