

2015-05-03-173407-elliptic-curve

William Stein

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Contents

Points on $y^2 = x(x-3)(x+4)$.

```
expand(x*(x-3)*(x+4))  
x^3 + x^2 - 12*x
```

```
E = EllipticCurve([0,1,0,-12,0]); show(E)  
 $y^2 = x^3 + x^2 - 12x$ 
```

```
E.conductor()  
168
```

```
E.rank()  
0
```

```
E.cremona_label()  
'168a2'
```

```
E.integral_points()  
[(-4 : 0 : 1), (0 : 0 : 1), (3 : 0 : 1)]
```

```
E.torsion_points()  
[(-4 : 0 : 1), (0 : 0 : 1), (0 : 1 : 0), (3 : 0 : 1)]
```