

### Frame for Lightning Bolt Alg. (Eucl-alg)

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| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   | 95    | —     | 1     | 0     |
| 1   | 57    |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |

So 19 =            · 95 +            · 57.

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   | 161   | —     | 1     | 0     |
| 1   | 133   |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |

So            =            · 161 +            · 133.

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   | 231   | —     | 1     | 0     |
| 1   | 616   |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   | 483   | —     | 1     | 0     |
| 1   | 165   |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   | 1234  | —     | 1     | 0     |
| 1   | 321   |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |
| 7   |       |       |       |       |
| 8   |       |       |       |       |
| 9   |       |       |       |       |
| 10  |       |       |       |       |

So 1 =            · 1234 +            · 321.

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   | -178  | —     | 1     | 0     |
| 1   | 110   |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |
| 7   |       |       |       |       |
| 8   |       |       |       |       |
| 9   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   | 91    | —     | 1     | 0     |
| 1   | -56   |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   |       | —     | 1     | 0     |
| 1   |       |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |
| 7   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   |       | —     | 1     | 0     |
| 1   |       |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |
| 7   |       |       |       |       |
| 8   |       |       |       |       |
| 9   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   |       | —     | 1     | 0     |
| 1   |       |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |
| 7   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   |       | —     | 1     | 0     |
| 1   |       |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |
| 7   |       |       |       |       |
| 8   |       |       |       |       |
| 9   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   |       | —     | 1     | 0     |
| 1   |       |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |
| 7   |       |       |       |       |

| $n$ | $r_n$ | $q_n$ | $s_n$ | $t_n$ |
|-----|-------|-------|-------|-------|
| 0   |       | —     | 1     | 0     |
| 1   |       |       | 0     | 1     |
| 2   |       |       |       |       |
| 3   |       |       |       |       |
| 4   |       |       |       |       |
| 5   |       |       |       |       |
| 6   |       |       |       |       |
| 7   |       |       |       |       |
| 8   |       |       |       |       |
| 9   |       |       |       |       |