Exercise

Express gcd(65,1326) as linear combinations of its arguments.

- First, use the Euclidean algorithm to find gcd(65,1326):
  - $1326 = 20 \cdot 65 + 26$
  - $65 = 2 \cdot 26 + 13$
  - $26 = 2 \cdot 13 + 0$
- Second, working backwards:
  - $13 = 65 - 2 \cdot 26$
  - $13 = 65 - 2 \cdot (1326 - 20 \cdot 65)$
  - $13 = 41 \cdot 65 - 2 \cdot 1326$