

Divisions involving Negatives

- Simplest solution: convert to positive and adjust sign later

- Note that multiple solutions exist for the equation:

$$\text{Dividend} = \text{Quotient} \times \text{Divisor} + \text{Remainder}$$

| | | | | |
|----|-----|----|----------|----------|
| +7 | div | +2 | Quo = +3 | Rem = +1 |
| -7 | div | +2 | Quo = -3 | Rem = -1 |
| +7 | div | -2 | Quo = -3 | Rem = +1 |
| -7 | div | -2 | Quo = +3 | Rem = -1 |

Convention: Dividend and remainder have the same sign

Quotient is negative if signs disagree

These rules fulfil the equation above