

Math in bash

- Bash only directly supports integer math: NOT floating point
- Integer math expressions can be enclosed in `(())`, e.g.

```
(( c = a + b ))
```

- The result of an expression can be captured with `$(())`, e.g.

```
c=$( ( a + b ) )
```

- The `let` command allows the use of expressions in text, e.g.

```
let "c = a + b"
```

- Supported operators include `+ - * / % **`

Floating point math

- Bash doesn't directly support floating point math
- you can create text strings holding floating point expressions and pass them to other programs (like `bc`) to evaluate, e.g.

```
answer=$(bc <<< "3.5 * 7.4") # answer is "25.9"
```

- Note the `<<<` is called the "here" string, and allows you to pass a text string to a program to be used as input (we'll come back to that later)