10.43, Complexity of Matrix-Matrix Mult

Blake Baird

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Prob 10.43

A 1500x1500 matrix multiplication takes 0.2s on a given computer. How long will a 3000x3000 matmul take on the same computer?

```
flops = function(n) { 2*n^3 - n }
t_1500 = 0.2
t_3000 = t_1500 * flops(n=3000) / flops(n=1500)
t_3000
```

```
## [1] 1.6
```