

Life gets too grim without its little challenges and they had thrown a big one at me. I made them eat it, but the big one I hadn't bought yet and the thought of it became more interesting every day.

...“No,” Kim interrupted, “I didn't mean that. Why did you come back?”

My mouth twitched back into a grin. “Things were getting dull. I was having fun. I hated to see it stop.”

She nodded as if she understood completely. “And when they stop being fun?”

I shrugged. “Then I'll do something else.”

...Finally Gavin said, “That was a very ingenious ruse you pulled, Mr. Morgan.”

I shrugged it off. “My pleasure. Maybe it will keep your boys on their toes next time.”

“There won't be a next time.”

“That's what you said the last time.”

A flush of red crept into his face from the neckline.
“There's one question... why you returned.”

I saw Kim's head turn my way a fraction of a second and knew she was smiling. “I was bored,” I told him.

“No other reason?”

“What one could there be?”

Somebody coughed. “You are at your best when you are bored, I assume?”

“I've never tried it any other way.”

— *The Delta Factor* (1967) by Mickey Spillane

Key Skill: Finding Patterns in the Noise

Let's examine **142857**

- Multiply by 2 — 285714 (left circular shift of two digits) **14 2857** → **2857 14**
- Multiply by 3 — 428571 (left circular shift one digit, first digit moved to back)
- Multiply by 4 — 571428 (left circular shift four digits)
- Multiply by 5 — 714285 (left circular shift five digits)
- Multiply by 6 — Guess what? See the pattern? Does it hold? What's left?

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- Multiply by 5 — 714285 (left circular shift five digits)
- Multiply by 6 — 857142 (left circular shift three digits)
- Multiply by 7 — 999999 (game over!)

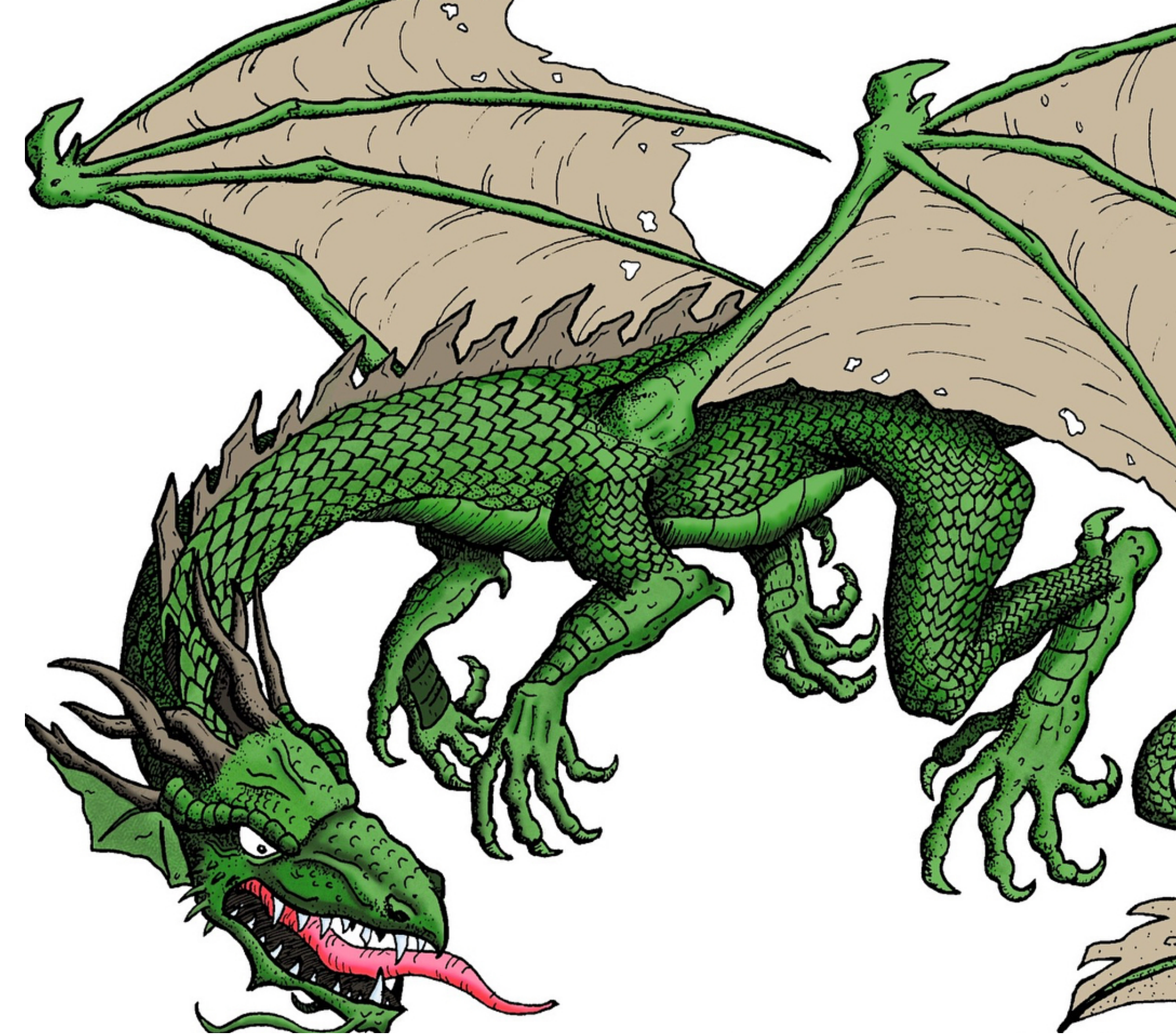
Key Skill: Finding Patterns in the Noise

Let's examine **142857**

- The pattern comes from decimal fractions
 - $1/2 = .5$, $1/3 = .333\dots$, $1/4 = .25$, $1/5 = .2$, $1/6 = .1666\dots$
 - $1/7 = .142857\ 142857\ 142857\dots$ (there's our number)
 - $2/7 = .285714\ 285714\dots$
 - Is there a point to this weirdness?

“If I have seen further than others, it is by standing on the shoulders of giants.”

— Future You, just chillin amongst the dragons



This slide deck:

<https://github.com/ewbarnard/dragons>

