

B.H. Brown's amazing theorem — in honor of Friday September 13 2019

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Source: B.H. Brown & Raphael Robinson, American Mathematical Monthly Volume 40, Number 10 (1933), page 607

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 - ▶ 1600, 2000, 2400, ... - YES
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- ▶ 400 years is exactly 20,871 weeks
- ▶ September 13 2019 is same day of week as September 13 2419, and September 13 2819, ...

A brute-force calculation

There are 4800 13th-of-the-months in any span of 400 years:

- ▶ **Monday:** 685
- ▶ **Tuesday:** 685
- ▶ **Wednesday:** 687
- ▶ **Thursday:** 684
- ▶ **Friday:** 688
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So 13th is (slightly) more likely to be Friday than any other day!