

becomes arbitrarily large as  $x$  approaches infinity and therefore cannot have

$$\frac{1}{r-1}$$

as a limit. This contradicts our assumption that  $r > 1$ .

That

$$\lim_{x \rightarrow 0} r_x = 2$$

follows immediately from the fact that

$$P_0(\lambda) = \lambda^2 - 2\lambda.$$

#### REFERENCES

1. L. W. Cohen and Nelson Dunford, "Transformations on Sequence Spaces," Duke Math. J., 3 (1937), 689-701.
2. A. E. Taylor, Functional Analysis, J. Wiley.

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#### A CURIOUS PROPERTY OF A SECOND FRACTION

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In the April, 1968 Fibonacci Quarterly (p. 156), J. Wlodarski discussed some properties of the fraction  $878/323$  which approximates  $e$ . Consider the approximation of  $\pi$  correct to six decimal places given by  $355/113 = 3.141592^+$ . The sum of the digits of the numerator is 13, and of the denominator, 5.  $13/5 = 1 + 8/5$ , or one added to the best approximation to the "Golden Ratio" using two one-digit numbers. Also,

$$\frac{355}{113} = \frac{300 + 55}{100 + 13},$$

where 55 and 13 are Fibonacci numbers.

Taking  $355/226$  as an approximation of  $\pi/2$  leads to the observation that

$$\frac{355}{226} = \frac{377 - 22}{233 - 7}$$

where  $377/233$  approximates the golden ratio and  $22/7$  approximates  $\pi$ , and 377 and 233 are Fibonacci numbers.