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26) Below is a brief chronology of some early approximations for π . Compare the decimals for these fractions with the value of π to 15 decimal places:

$$\pi = 3.141592653589793$$

Which one of the following fractions is closest to the value of π ? Which two of these fractions are equal?

a. Archimedes (240 B.C.), $\frac{223}{71}$ - Approximation: 3.14084507

b. Claudius Ptolemy (A.D. 150), $\frac{377}{120}$ - Approximation: 3.141666667

c. Tsu Ch'ung-chih (A.D. 480), $\frac{355}{113}$ - Approximation: 3.14159292

d. Aryabhata (A.D. 530), $\frac{62832}{20000}$ - Approximation: 3.1416

e. Bhaskara (A.D. 1150), $\frac{3927}{1250}$ - Approximation: 3.1416

- Tsu Ch'ung-chih's fraction is the closest to the value of π . This fraction is approximated to 3.14159292, which is the closest to π . Aryabhata and Bhaskara's fractions are equal. Both of these fractions simplify to 3.1416.