

How many whole numbers lie in the interval between $\frac{5}{3}$ and 2π ?

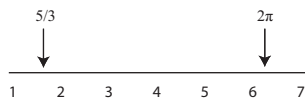
- (A) 2 (B) 3 (C) 4 (D) 5 (E) infinitely many

2000 AMC 8, Problem #3—

$\frac{5}{3}$ is greater than 1 and less than 2; 2π is greater than 6 and less than 7.

Solution

Answer (D): The smallest whole number in the interval is 2 because $\frac{5}{3}$ is more than 1 but less than 2. The largest whole number in the interval is 6 because 2π is more than 6 but less than 7. There are five whole numbers in the interval. They are 2, 3, 4, 5, and 6.



Difficulty: Medium-hard

NCTM Standard: Number and Operations Standard for Grades 6-8: compare and order fractions, decimals, and percents efficiently and find their approximate locations on a number line.

Mathworld.com Classification: Number Theory > Arithmetic > Fractions > Fraction
Number Theory > Constants > Pi