

The Cantor Set

1) What is it?

2) What are its characteristics?

3) How big is the Cantor Set?

4) Decimal representation - base 3

5) What points are in the Cantor set?

$\frac{1}{2}$	$\frac{1}{8} \frac{3}{8} \frac{5}{8} \frac{7}{8}$
$\frac{1}{3} \frac{2}{3}$	$\frac{1}{9} \frac{2}{9} \frac{4}{9} \frac{5}{9} \frac{7}{9} \frac{8}{9}$
$\frac{1}{4} \frac{3}{4}$	$\frac{1}{10} \frac{3}{10} \frac{7}{10} \frac{9}{10}$
$\frac{1}{5} \frac{2}{5} \frac{3}{5} \frac{4}{5}$	$\frac{1}{11} \frac{2}{11} \frac{3}{11} \frac{4}{11} \frac{5}{11} \frac{6}{11} \frac{7}{11} \frac{8}{11} \frac{9}{11} \frac{10}{11}$
$\frac{1}{6} \frac{5}{6}$	$\frac{1}{12} \frac{5}{12} \frac{7}{12} \frac{11}{12}$
$\frac{1}{7} \frac{2}{7} \frac{3}{7} \frac{4}{7} \frac{5}{7} \frac{6}{7}$	$\frac{1}{13} \frac{2}{13} \frac{3}{13} \frac{4}{13} \frac{5}{13} \frac{6}{13} \frac{7}{13} \frac{8}{13} \frac{9}{13} \frac{10}{13} \frac{11}{13} \frac{12}{13}$