Converting Decimals to Fractions

Date_____ Period____

Convert the decimal to a fraction.

1) 0.021

2) 0.82

3) 0.015

4) 0.569

5) 0.113

6) 0.202

7) 0.016

8) 0.193

9) 0.3

Converting Decimals to Fractions

Date_____Period____

Convert the decimal to a fraction.

1) 0.021

Answer: $\frac{21}{1000}$

2) 0.82

Answer: $\frac{41}{50}$

3) 0.015

Answer: $\frac{3}{200}$

4) 0.569

Answer: $\frac{569}{1000}$

5) 0.113

Answer: $\frac{113}{1000}$

6) 0.202

Answer: $\frac{101}{500}$

7) 0.016

Answer: $\frac{2}{125}$

8) 0.193

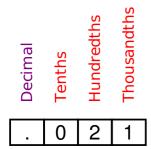
Answer: $\frac{193}{1000}$

9) 0.3

Answer: $\frac{3}{10}$

Solution Steps

1) 0.021



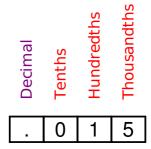
We can write $\frac{21}{0.021} = \frac{1000}{1000}, \mbox{ meaning 21}$ hundredths

2) 0.82

Decimal	Tenths	Hundredths
	8	2

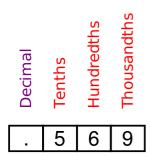
We can write $0.82=\overline{1000}$, meaning 82 hundredths 820 $\overline{1000}$ can be reduced, since 20 is a factor of both 820 and 1,000: 820 $\div \frac{20}{20} = \frac{41}{50}$ The fraction is now in lowest terms

3) 0.015

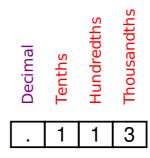


We can write $\frac{15}{1000}$, meaning 15 hundredths $\frac{15}{1000}$ can be reduced, since 5 is a factor of both 15 and $\frac{1}{1000}$: $\frac{5}{1000}$ ÷ $\frac{3}{1000}$ The fraction is now in

lowest terms



We can write $0.569 = \frac{569}{1000} \text{, meaning}$ 569 thousandths



We can write $\frac{113}{0.113} = \frac{1000}{1000}, \ \text{meaning}$ 113 thousandths

7) 0.016

Decimal
Tenths
Hundredths
Thousandths

We can write $\frac{16}{1000}$, meaning 16 hundredths $\frac{16}{1000}$ can be reduced, since 8 is a factor of both 16 and $\frac{1000}{1000}$: $\frac{8}{1000}$: $\frac{2}{1000}$: The fraction is now in

lowest terms

8) 0.193

Decimal
Tenths
Hundredths
Thousandths

We can write $\frac{193}{1000}$, meaning 193 thousandths

We can write $0.202 = \frac{202}{1000}, \text{ meaning}$ 202 thousandths $\frac{202}{1000} \text{ can be reduced, since}$ 2 is a factor of both 202 and 1,000: $\frac{202}{1000} \div \frac{2}{2} = \frac{101}{500}$ The fraction is now in lowest terms

9) 0.3

Decimal Tenths

We can write $0.3=\frac{300}{1000}$, meaning 3 tenths $\frac{300}{1000}$ can be reduced, since 100 is a factor of both 300 and 1,000: $\frac{300}{1000} \div \frac{100}{100} = \frac{3}{10}$ The fraction is now in lowest terms