Decimals

worksheet

1. Complete the following table identifying the verbal description with the appropriate decimal and fraction form.

Verbal	Decimal	Fraction
1 tenth	0.1	1/10
1 hundredth	0.01	1/100
1 thousandth	0.001	1/1,000
1 ten-thousandth	0.0001	1/10,000

2. Complete each operation.

$3.146 + 2.0159 =$ 5.1619

$5.43 - 8.215 =$ -2.785

$1.25 \times 37.824 =$ 47.28

$4.1 \div 0.2 =$ 20.5

3. True or false? $3.2636363\ldots$ can be rewritten as $3.2\overline{63}$. [True]

4. Round the following numbers to the indicated place value.

	Tenths	Hundredths	Thousandths
3.78906	3.8	3.79	3.789
4.2487642	4.2	4.25	4.249
5.649987	5.6	5.65	5.650

Decimals

KEY POINTS	NOTES
Place value	The value of the location of a digit within a given number. Ex: In the number 4.321, the digit in the tenths place is 3.
Add/Subtract decimals	Align the decimal numbers so the decimal points are on top of each other, then perform the operation among the digits in the farthest right place value, and continue the process moving left.
Multiplying decimals	The decimal numbers will need to be right-aligned and zeros for place holders will need to be used when multiplying multi-digit decimal numbers.
Dividing decimals	Use the long division method to find the quotient of decimal numbers.
Repeating decimals	A decimal number where a digit or sequence of digits repeats infinitely. Ex: $0.\overline{3}$ or $0.\overline{54}$.
Rounding rules	"If the next digit is less than 5, round the previous digit down; if it's 5 or greater, round the previous digit up." Ex: 3.14159 rounded to the nearest thousandths is 3.142.