

GRADE 6 - LESSON 6 DECIMALS

UNDERSTANDING DECIMALS

PLACE VALUE

Just like with whole numbers, the place value in a decimal depends on the position of a digit following the decimal point.

$$\frac{1}{10} = 0.1$$

a simple fraction with the denominator 10, 100, 1000... can be recorded as a decimal

$$7.526 = 7 + 0.5 + 0.02 + 0.006$$

Each subsequent unit within a decimal is ten times less than the previous one

ROUNDING DECIMALS

Sometimes it is necessary to round decimals.

They can be rounded up or down.

- When the dropped digit in the decimal is 0,1,2,3,4 then the remaining digit stays the same
- When the dropped digit in the decimal is 5,6,7,8,9 then the remaining digit increases by 1

Round 25.185 to hundredths tenths nearest whole

MULTIPLYING DECIMALS

 $1.02 \times 4 = 4.08$

To multiply a decimal by another decimal - multiply ignoring the decimal points.

Then place the decimal point in the product such that it separates the same number of digits as in both, the multiplier and the multiplicand combined.

MULTIPLYING DECIMALS

SPECIAL CASES

When multiplying a decimal by 10, 100, 1000 move the decimal point to the right according to the number of zeros

When multiplying a decimal by 0.1, 0.01, 0.001 move the decimal point to the left according to the number of zeros

TRY IT!

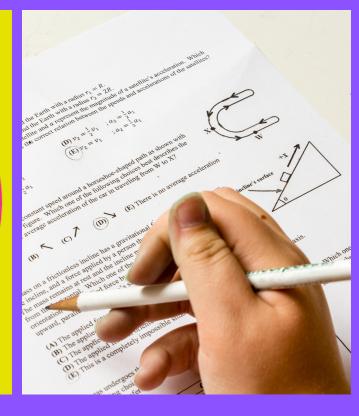


Record as a decimal

- 125 wholes and 37 hundredths
- 10 wholes and 3 hundredths
- 4 wholes and 37 thousandths
- 0 wholes and 8 thousandths







CONTINUE TO GRADE 6 LESSON 7

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