Monsters meet Decimals

1. Ignore the decimal and any zeros, do a monster on the normal number, and get an answer
2. Count the decimal places
3. Take the number of decimal places and divide by the number in the hook.
4. That number is the amount of decimal places needed in the final answer.

Sample Problem:

$\sqrt{.000016}$ A monster on just the 16 gets you a 4. There are 6 total decimal places and divided by the 2 in the hook, we find out that our final answer needs 3 decimal places. Final answer is .004

Practice Decimal Monster Problems:

- $\sqrt[5]{.0000000032}$
- $\sqrt{2.56}$
- $\sqrt[5]{1.21}$
- $\sqrt[3]{.343}$

Multiplying Decimals

1. Ignore the dots and zeros then multiply like normal
2. Add up all the decimal places in both numbers
3. That's how many places need to be in your final answer.

Practice Decimal Multiplication Problems:

- 9.678(6.78)
- .00000098(.0000047)
- 8,700,000(.00039) *Ignore dots and zeros and multiply like normal. Put the zeros from the whole number back on first and then make sure the final answer has the correct number of decimal places.

Exponents and Decimals

Follow the rules for multiplying decimals. Pay extra attention to make sure you get the correct number of decimal points in the final answer.

Practice Decimal Exponent Problems:

- $(.002)^4$
- $(.0001)^2$

Long Division of Decimals

The number on the outside has to be a whole number. Move the decimal place as needed. However many places you move on the outside you must move the same number of places on the inside. Decimals should continue to be divided until they either end or repeat. Do not round unless the problem tells you to.

Practice Ordering Decimals Problems:

- $.58 \div 2.7$ $.21\overline{48}$
- $3.459 \div .2$ 17.295
- $49.8 \div .03$ $16\overline{60}$
- $.04 \div 5.4$ $.00\overline{74}$
- $.0685 \div .008$ 8.5625
- $35.45 \div 7.93$ round to four decimal places 4.4704