Guided Notes

3.2 Estimate Products (6.NS.3)

Estimating Using Rounding

1.) Underline the digit to be rounded.
2.) Look at the digit to the right of place being rounded.
3.) If the digit is 4 or less, the underline digit remains the same.
4.) If the digit is 5 or greater, the underline digit goes up by 1.
5.) After rounding, all places values to the right of the underline digit and after (behind) the decimal point have a value of zero.
6.) Multiply.

Guided Practice: Estimate each product.

1.) 5(8) • 4 ≈ 6 • 4 = 24

2.) 13(9)2 • 2(7) ≈ 14 • 3 = 42

3.) 94(8)9 • 3(1)1 ≈ 95 • 3 = 285

4.) **Financial Literacy** - A grocery store sells American cheese for ($3.89) per pound. About how much would (1.89) pounds of the cheese cost?

3.(8)9 x 1.(8)9

4 x 2 = 8

The cheese would cost about $8.

not needed

5.) **Music** ~~Greg has 52 megabytes left on his MP3 player.~~ He wants to download 7 songs that each use 7.9 megabytes of memory. He estimates that he will need 56 megabytes of memory. Is his estimate reasonable? Explain your reasoning.

7 x 7.(9)

7 x 8 = 56

yes, Greg's estimate is correct because 7.9 rounds to 8, and 7 x 8 = 56.

Building on the Essential Question - How is estimation helpful when adding and subtracting decimals?

Estimation can help determine if your answer is accurate (makes sense).

Rate Yourself

How confident are you about estimating products? Check the box that applies.