Estimating Products and Quotients Lesson

A. Estimate the product of   19 x 263.

B. Estimate the quotient of 177 ÷ 6.

Explanation for A:

Step 1) Round the values to their nearest tens place.

19 when rounded to the nearest tens place is 20 because the ones place digit (9) is greater than or equal to 5. 263 when rounded to the nearest tens place is 260 because the ones place digit (3) is less than 5.

Step 2)We can now rewrite the problem as: 20 x 260

Step 3) I always find it easier to multiply the front digits and drop the zeroes.

  260

X 20

 52 00   or 5,200

Explanation for B:

Quotients are a bit trickier. We will now judge the best place to round to based on which value would allow the divisor to go evenly into the dividend. The best way to do this is skip count with the divisor 6, 12, 18, 24, 30, 36, 42…

177 ÷ 6   we can see that 6 can easily go into 18. We can make this happen by rounding to the nearest tens place. We can rewrite it as 180 ÷ 6 = 30.