

Name _____

Estimate with 2-Digit Divisors

You can use *compatible numbers* to estimate quotients. Compatible numbers are numbers that are easy to compute with mentally.

To find two estimates with compatible numbers, first round the divisor. Then list multiples of the rounded divisor until you find the two multiples that are closest to the dividend. Use the one less than and the one greater than the dividend.

Use compatible numbers to find two estimates. $4,125 \div 49$

Step 1 Round the divisor to the nearest ten.
49 rounds to 50.

Step 2 List multiples of 50 until you get the two closest to the dividend, 4,125.
Some multiples of 50 are:

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500
4,000 and 4,500 are closest to the dividend.

Step 3 Divide the compatible numbers to estimate the quotient.
 $4,000 \div 50 = \underline{80}$ $4,500 \div 50 = \underline{90}$

The more reasonable estimate is $4,000 \div 50 = 80$, because 4,000 is closer to 4,125 than 4,500 is.

Use compatible numbers to find two estimates.

1. $42 \overline{)1,578}$

2. $73 \overline{)4,858}$

3. $54 \overline{)343}$

4. $4,093 \div 63$

5. $4,785 \div 79$

6. $7,459 \div 94$

Use compatible numbers to estimate the quotient.

7. $847 \div 37$

8. $6,577 \div 89$

9. $218 \div 29$