

Estimating Quotients with 2-Digit Divisors

You can use compatible numbers to estimate a quotient.

Find $175 \div 32$.

Step 1: Find compatible numbers for 175 and 32.

32 rounds to 30.

Think: 18 can be divided evenly by 3.

180 is close to 175 and 30 is close to 32.

180 and 30 are compatible numbers.

Step 2: Divide. Use patterns to help you, if possible.

Think: $180 \div 30$ is the same as
18 tens \div 3 tens.

$$18 \div 3 = 6$$

$$\text{So, } 180 \div 30 = 6.$$

Step 3: Check for reasonableness.

$$6 \times 30 = 180$$

So, a good estimate of $175 \div 32$ is 6.

Estimate each quotient using compatible numbers.

1. $298 \div 25$ _____

2. $5,391 \div 77$ _____

3. $24,303 \div 12$ _____

4. $276 \div 42$ _____

5. $1,347 \div 54$ _____

6. $5,564 \div 91$ _____

At Elmer Elementary School, fifth-grade students are saving money for a summer trip to Washington, D.C.

7. The money Percy has saved is how many times as great as the money James has saved?

Student	Amount Saved
Percy	\$125
Emily	\$ 80
George	\$202
James	\$ 41
Bertha	\$159