

Vocabulary

1. **Compatible numbers** are numbers that are easy to compute mentally. Compatible numbers can be used to estimate quotients.

Use compatible numbers to estimate $58 \div 8$.

Think of a multiplication fact with 8 as a factor that has a product that is close to 58.

$$8 \times 6 = \underline{48}$$

$$8 \times 7 = \underline{56}$$

$$8 \times 8 = \underline{64}$$

56 is close to 58, so divide 56 by 8.

$$\underline{58} \div 8 = \underline{7}$$

So, $58 \div 8$ is about = 7.

2. Use compatible numbers to estimate $267 \div 3$.

What number is close to 267 and is easy to divide by 3?

Use multiples of 10 that are close to 267.

Is 260 easily divided by 3? Think $26 \div 3$.

The quotient is 8 R2, so this is not an option.

Is 270 easily divided by 3? Think $27 \div 3$. 9

$$\underline{27} \div 3 = \underline{9}$$

So, $267 \div 3$ is about 9.

Use compatible numbers to estimate each quotient.

3. $375 \div 6$ $360 \div 6 = 60$

4. $606 \div 3$ $600 \div 3 = 200$

5. $48 \div 5$ $45 \div 5 = 9$

6. $277 \div 7$ $280 \div 7 = 40$

7. $595 \div 6$ $600 \div 6 = 100$

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$$\underline{150} \div 5 = 30$$

8. Use compatible numbers to estimate $148 \div 5$. Show your work.

Vocabulary

1. **Rounding** is a process that determines which multiple of 10, 100, 1,000, and so on a number is closest to.

Round each number to the nearest thousand.

5,982 rounds to 6,000.

4,239 rounds to 4,000.

Round each number to the nearest hundred.

3,529 rounds to 3,500.

6,284 rounds to 6,300.

You can use rounding to estimate quotients.

2. Estimate $3,742 \div 8$ by rounding the dividend.

Round 3,742 to the nearest thousand. 4,000

Use the rounded dividend to estimate the quotient.

$$\underline{4,000} \div 8 = \underline{500}$$

So, $3,742 \div 8$ is about 500.

3. Estimate $2,389 \div 3$ by rounding the dividend.

Round 2,389 to the nearest hundred. 2,400

Use the rounded dividend to estimate the quotient.

$$\underline{2,400} \div 3 = \underline{800}$$

So, $2,389 \div 3$ is about 800.

Estimate each quotient.

4. $2,782 \div 7$ $2,800 \div 7 = 400$

5. $3,578 \div 6$ $3,600 \div 6 = 600$

6. $3,099 \div 3$ $3,000 \div 3 = 1,000$

7. $3,976 \div 5$ $4,000 \div 5 = 800$

On the Back!

8. Use rounding to estimate $1,769 \div 3$.

$$\underline{1,800} \div 3 = 600$$