

Name: _____

9. Estimate Quotients

A. Visual Learning

How can you estimate quotient?

Estimate $47 \div 5$

Use compatible numbers

Step 1: Find the compatible numbers

Think of a number that is close to 47 and is easy to divide by 5.

45 can be divided by 5.

45 is close to 47.



So 45 and 5 are **compatible numbers**.

Step 2: Divide $47 \div 5$

$45 \div 5 = 9$

$47 \div 5$ is about 9.

Use multiplication

Think of a multiplication fact with 5.
9 times what number is about 47.

$9 \times 5 = 45$.

$45 \div 5 = 9$

So, $47 \div 5$ is about 9.

There is more than one way to estimate a quotient.



B. Vocabulary

estimate: _____

quotient: _____

compatible numbers: _____

dividend: _____

C. Independent Practice

In 1 – 6, estimate each quotient.

1. $15 \div 2$ is about _____



$14 \div 2 =$ _____

2. $26 \div 4$ is about _____



_____ $\div$ _____ = _____

3. $33 \div 5$ is about _____



_____ $\div$ _____ = _____

4. $45 \div 6$ is about ____



____ $\div$ ____ = ____

5. $34 \div 8$ is about ____



____ $\div$ ____ = ____

6. $55 \div 9$ is about ____



____ $\div$ ____ = ____

7. Tick $\checkmark$ all the statements with correctly estimated quotients.

☐

$33 \div 8$ is about 4.

☐

$88 \div 3$ is about 30.

☐

$9 \div 4$ is about 2.

☐

$25 \div 7$ is about 3.

☐

$58 \div 7$ is about 7.

☐

$42 \div 5$ is about 8.

Solve the problems.

8. Anna has 25 insects in her nature collection.

She has 3 times as many insects as leaves in her collection.

About how many leaves does she have in her collection?



A. 75 leaves

B. 22 leaves

C. 10 leaves

D. 8 leaves

9. The third graders have 37 straws for a picnic.

They want to put an equal number of straws in 5 cups.

About how many straws do they put in each cup?



A. They put about 5 straws in each cup.

B. They put about 7 straws in each cup.

C. They put about 37 straws in each cup.

D. They put about 185 straws in each cup.

10*. Can John use the compatible numbers to the right to estimate $71 \div 8$? Explain.

$71 \div 8$



$70 \div 8 = \underline{\hspace{2cm}}$

