

MY Homework

Lesson 8

Estimate Products

Homework Helper



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Mountain View Elementary is sending 21 boxes of magazines to a school in Uruguay. There are 154 magazines in each box. About how many magazines are they sending?



Estimate the product of 21 and 154.

One Way Round each factor to the nearest ten.

$$\begin{array}{r} 154 \longrightarrow 150 \\ \times 21 \longrightarrow \times 20 \\ \hline \end{array} \quad 3,000$$

Round 154 to the nearest ten.

Round 21 to the nearest ten.

Find 150×20 mentally.

By rounding both factors to the nearest ten, the estimate is about 3,000 magazines.

Another Way Use compatible numbers.

$$\begin{array}{r} 154 \longrightarrow 200 \\ \times 21 \longrightarrow \times 20 \\ \hline \end{array} \quad 4,000$$

Use numbers that are easy to multiply mentally such as 200 and 20.

Find 200×20 mentally.

By using compatible numbers, the estimate is about 4,000 magazines.

Practice

Estimate by rounding or using compatible numbers. Show how you estimated.

1.
$$\begin{array}{r} 4 \\ \times 24 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 76 \\ \times 78 \\ \hline \end{array}$$


3.
$$\begin{array}{r} 508 \\ \times 27 \\ \hline \end{array}$$



Problem Solving

4. For a school assembly, students sit in chairs that are arranged in 53 rows. There are 12 chairs in each row. About how many students can be seated? Show how you estimated.

5. Klara bought a dozen bags of bird food for \$27. Use compatible numbers to find the approximate cost of six dozen bags of bird food. Show how you estimated.

6. **Mathematical PRACTICE**  **Find the Error** Rico is estimating 139×18 . Find his mistake and correct it.

$$100 \times 10 = 1,000$$

Vocabulary Check



Fill in the blank with the correct term or number to complete the sentence.

7. Compatible numbers are numbers in a problem that are easy to compute _____.

Test Practice

8. On a cross-country vacation, Maria filled her 14-gallon gas tank eleven times. Which is the best estimate of how many gallons of gas she put in the tank altogether?
- (A) 75 gallons (C) 200 gallons
(B) 150 gallons (D) 225 gallons



CHEAP!
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