LESSON MAKER PRO

Estimate It!

Use rounding to make multiplication and division easier.

GRADE 5 · 5.NOS.B.7.a

5.NOS.B.7.a "Apply estimation strategies to estimate products and quotients."

NAME _____ DATE _____

ROUND, THEN CALCULATE

To estimate a product or quotient, round the numbers to nearby values that are easier to use. Multiply or divide the rounded numbers. Say "about" because an estimate is not the exact answer.

WORKED EXAMPLE

Round both factors to the nearest ten to estimate 74 × 18.

1. Round 74 to 70.
2. Round 18 to 20.
3. Multiply: 70 × 20 = 1,400.

Answer: About 1,400

PRACTICE 6 problems

1 Round both factors to the nearest ten. Estimate 62 × 27.

ANSWER _____

2 Round 184 to the nearest hundred and 39 to the nearest ten. Estimate 184 × 39.

ANSWER _____

3 Round 316 to the nearest hundred and 7 to the nearest ten. Estimate 316 × 7.

ANSWER _____

4 Round 587 to the nearest hundred and 29 to the nearest ten. Estimate 587 ÷ 29.

ANSWER _____

5 Round 1,182 to the nearest hundred and 58 to the nearest ten. Estimate 1,182 ÷ 58.

ANSWER _____

6 Round 1,524 to the nearest hundred and 31 to the nearest ten. Estimate 1,524 ÷ 31.

ANSWER _____

APPLY IT Show your work

1 A game shop has 293 packs of trading cards with 31 cards in each pack. About how many cards are there? Round the number of packs to the nearest hundred and the cards per pack to the nearest ten.

WORK SPACE

ANSWER _____

2 A school club has 1,184 beads to share equally among 39 members. About how many beads will each member get? Round the total beads to the nearest hundred and the number of members to the nearest ten.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Mia and Sam estimate 48 × 29. Mia rounds both factors to the nearest ten. Sam rounds only 29 to the nearest ten. Find both estimates. Which is closer to the exact product? Show how you know.

WORK SPACE AND ANSWER

ANSWER KEY # Estimate It!

GRADE 5 · 5.NOS.B.7.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Round both factors to the nearest ten. Estimate 62 × 27.	**About 1,800**
2	Round 184 to the nearest hundred and 39 to the nearest ten. Estimate 184 × 39.	**About 8,000**
3	Round 316 to the nearest hundred and 7 to the nearest ten. Estimate 316 × 7.	**About 3,000**
4	Round 587 to the nearest hundred and 29 to the nearest ten. Estimate 587 ÷ 29.	**About 20**
5	Round 1,182 to the nearest hundred and 58 to the nearest ten. Estimate 1,182 ÷ 58.	**About 20**
6	Round 1,524 to the nearest hundred and 31 to the nearest ten. Estimate 1,524 ÷ 31.	**About 50**

PART 2 · APPLY IT

1. **About 9,000 cards** Round 293 to 300 and 31 to 30. Then multiply 300 × 30 = 9,000.
2. **About 30 beads per member** Round 1,184 to 1,200 and 39 to 40. Then divide 1,200 ÷ 40 = 30.

CHALLENGE

Mia estimates 50 × 30 = 1,500, and Sam estimates 48 × 30 = 1,440. The exact product is 1,392, so Sam's estimate is closer: it is 48 away, while Mia's is 108 away.

The estimates use the rounding places stated in each problem. Accept answers written with "about" or the symbol ≈.