LESSON MAKER PRO

Multiply Then Decide

Use models and operations to solve problems in steps.

GRADE 4 · 4.N.2.4

4.N.2.4 "Apply and analyze models to solve multi-step problems requiring the use of addition, subtraction, and multiplication of multi-digit whole numbers. Use various strategies, including the relationship between operations..."

NAME _____ DATE _____

CHOOSE THE NEXT STEP

Multiply to find the total in equal groups. Then add or subtract to match what happens next. Estimate to check whether your answer makes sense.

WORKED EXAMPLE

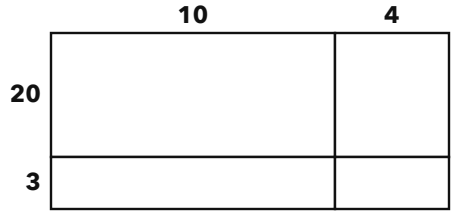
A teacher has 36 packs of 12 pencils and 45 loose pencils. How many pencils are there in all?

1. 36 × 12 = 36 × (10 + 2)
2. 36 × 10 = 360 and 36 × 2 = 72
3. 360 + 72 = 432
4. 432 + 45 = 477

Answer: 477 pencils

PRACTICE 6 problems

1 Use the area model to find 23 × 14. Then subtract 58. What is the result?



ANSWER _____

2 A shop has 18 boxes of 26 stickers and gets 65 more stickers. How many stickers does it have now?

ANSWER _____

3 Find (47 × 13) - 86.

ANSWER _____

4 Estimate using 30 × 16 + 140. Then find the exact value of 29 × 16 + 137.

ANSWER _____

5 Find (52 × 11) - (28 × 9).

ANSWER _____

6 A club has 34 teams with 15 members on each team. Then 78 members leave and 25 new members join. How many members are in the club now?

ANSWER _____

APPLY IT Show your work

1 At a gaming club, 27 players each collect 18 game cards. They use 125 cards to make a shared display. How many cards are left?

WORK SPACE

ANSWER _____

2 For a school movie night, 32 rows have 14 seats each. Tickets for 289 seats are sold on Thursday and 97 on Friday. How many seats are still open?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Two classes each make 24 bundles of 13 friendship bracelets. Together, they give away 175 bracelets, then make 48 more. How many bracelets do they have now? Use an estimate to explain why your answer makes sense.

WORK SPACE AND ANSWER

ANSWER KEY

Multiply Then Decide

GRADE 4 · 4.N.2.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use the area model to find 23 × 14. Then subtract 58. What is the result?	**264**
2	A shop has 18 boxes of 26 stickers and gets 65 more stickers. How many stickers does it have now?	**533 stickers**
3	Find (47 × 13) - 86.	**525**
4	Estimate using 30 × 16 + 140. Then find the exact value of 29 × 16 + 137.	**Estimate: 620; exact value: 601**
5	Find (52 × 11) - (28 × 9).	**320**
6	A club has 34 teams with 15 members on each team. Then 78 members leave and 25 new members join. How many members are in the club now?	**457 members**

PART 2 · APPLY IT

1. **361 cards** The players collect 27 × 18 = 486 cards. After using 125, they have 486 - 125 = 361 cards left.
2. **62 seats** There are 32 × 14 = 448 seats, and 289 + 97 = 386 are sold. That leaves 448 - 386 = 62 open seats.

CHALLENGE

497 bracelets. They start with 2 × 24 × 13 = 624 bracelets, so 624 - 175 + 48 = 497. An estimate of 2 × 25 × 12 - 175 + 50 = 475 is close to 497.

Accept different correct methods for combining the steps. For the challenge, accept any reasonable estimate that supports 497.