LESSON MAKER PRO

Tool Smart Math

Plan, solve, and check with useful math tools.

GRADE 5 · 5.MP.5

5.MP.5 "Use appropriate tools strategically."

NAME _____ DATE _____

CHOOSE A USEFUL TOOL

Read the question and choose a tool that fits, such as an estimate, number facts, or a written calculation. Solve, then check whether your answer makes sense with an estimate or a related fact.

WORKED EXAMPLE

A theater has 63 seats in 9 equal rows. How many seats are in each row?

1. Estimate: 63 is close to 60, and 60 divided by 10 is about 6.
2. Use division: 63 divided by 9 = 7.
3. Check: 9 times 7 = 63.

Answer: 7 seats in each row

PRACTICE 5 problems

1 A library packs 70 bookmarks equally into 5 boxes. Use division, then check by multiplying. How many bookmarks go in each box?

ANSWER _____

2 A student has $25.00 and buys a game pass for $12.68. Round to the nearest dollar first, then subtract exactly. How much money is left?

ANSWER _____

3 A costume club has 4 3/4 yards of fabric and uses 2 1/2 yards. Rewrite the fractions with fourths to check. How much fabric remains?

ANSWER _____

4 A collector puts 24 trading-card packs with 5 cards each into an album. Use multiplication, then use an estimate to check. How many cards are in the album?

ANSWER _____

5 A music app logged 1,375 minutes in April and 648 minutes in May. Round to estimate, then add exactly. How many minutes were logged altogether?

ANSWER _____

APPLY IT Show your work

1 A student wants a $21.50 game. The student has $5.25 and earns $4 each week doing chores. Use an estimate and repeated addition or multiplication. How many whole weeks are needed to have enough money?

WORK SPACE

ANSWER _____

2 A school video club has 15 minutes for a showcase. Each clip is 2 1/2 minutes long. Use multiplication to plan. Can the club show 5 clips, and how much time will be left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A notebook store sells 3 notebooks for $12 or 1 notebook for $4.50. Mia needs exactly 8 notebooks. What is the least cost? Show a calculation and explain why it is the least cost.

WORK SPACE AND ANSWER

Tool Smart Math

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A library packs 70 bookmarks equally into 5 boxes. Use division, then check by multiplying. How many bookmarks go in each box?	**14 bookmarks in each box. Check: 14 times 5 = 70.**
2	A student has $25.00 and buys a game pass for $12.68. Round to the nearest dollar first, then subtract exactly. How much money is left?	**Estimate: about $12. Exact amount: $12.32.**
3	A costume club has 4 3/4 yards of fabric and uses 2 1/2 yards. Rewrite the fractions with fourths to check. How much fabric remains?	**2 1/4 yards**
4	A collector puts 24 trading-card packs with 5 cards each into an album. Use multiplication, then use an estimate to check. How many cards are in the album?	**120 cards. An estimate is about 100 cards.**
5	A music app logged 1,375 minutes in April and 648 minutes in May. Round to estimate, then add exactly. How many minutes were logged altogether?	**Estimate: about 2,000 minutes. Exact total: 2,023 minutes.**

PART 2 · APPLY IT

1. **5 weeks** After 4 weeks, the student has $21.25, which is not enough. After 5 weeks, the student has $25.25, so 5 weeks are needed.
2. **Yes. The club can show 5 clips, with 2 1/2 minutes left.** Multiply 5 by 2 1/2 to get 12 1/2 minutes. Subtract 12 1/2 from 15 to get 2 1/2 minutes.

CHALLENGE

The least cost is $33. Two groups of 3 notebooks and 2 single notebooks cost $12 + $12 + $4.50 + $4.50 = $33. One group and 5 singles cost $34.50, and 8 singles cost $36, so $33 is least.

Accept equivalent reasonable estimates when the student uses the stated rounding method. Accept correct checking methods, including related multiplication, repeated addition, or comparison to an estimate.