

Task 6: Multiplication Marathon

Multiply multi-digit whole numbers using the standard algorithm · Page 1 of 2

Directions: Solve each problem. Stack the numbers in the work space and show all your steps.

1. Solve: 23×47

Answer: _____

2. Solve: 56×38

Answer: _____

3. Solve: 125×16

Answer: _____

4. Solve: 284×23

Answer: _____

5. Solve: 307×45

Answer: _____

6. Solve: $1,245 \times 12$

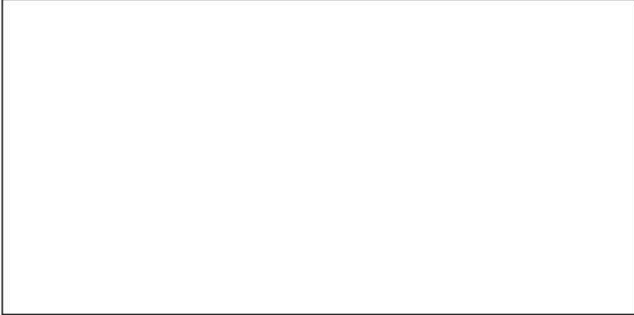
Answer: _____

Task 6: Multiplication Marathon

Multiply multi-digit whole numbers using the standard algorithm · Page 2 of 2

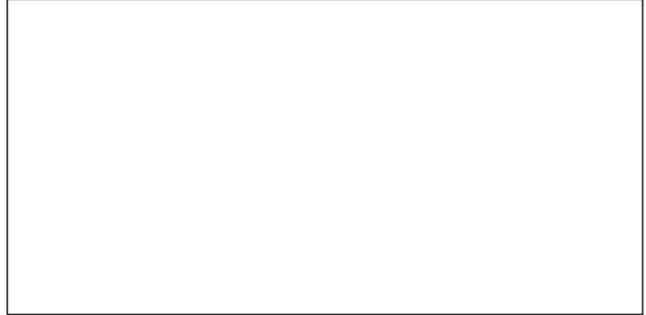
Directions (continued): Finish Task 6 with problems 7–12.

7. Solve: $2,138 \times 24$



Answer: _____

8. Solve: $3,456 \times 28$




Answer: _____

9. Solve: $4,092 \times 36$



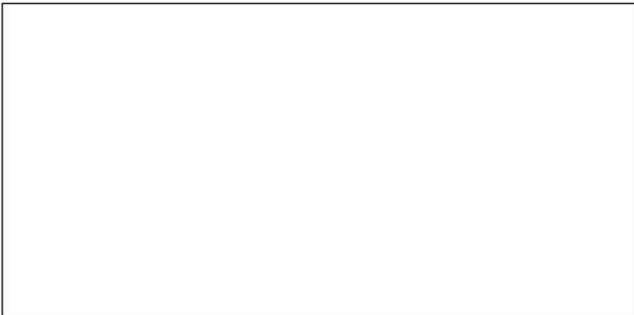
Answer: _____

10. Word Problem: A school has 145 students in each of 12 classrooms. How many students in all?



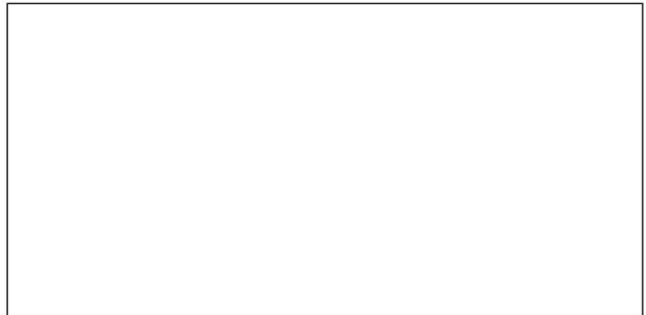
Answer: _____

11. Word Problem: A box has 248 paper clips. How many paper clips are in 35 boxes?



Answer: _____

12. Error Analysis: A student solved 24×36 and got 192. What mistake did the student make?



Answer: _____

TASK 7 · WORKED EXAMPLE

Long Division Lab

Divide 4-digit numbers by 2-digit numbers · 5.NBT.B.6

For long division, use the steps **DMSBR**: **D**ivide, **M**ultiply, **S**ubtract, **B**ring down, **R**epeat. Keep going until there are no more digits to bring down. Anything left over is the **remainder**.

$$\begin{array}{r}
 98 \\
 \hline
 16 \overline{) 1568} \\
 \underline{144} \\
 128 \\
 \underline{128} \\
 0
 \end{array}$$

$$1,568 \div 16 = 98$$

Step 1: Divide: How many times does the divisor go into the first digit(s) of the dividend?

Step 2: Multiply the quotient digit by the divisor and write it below.

Step 3: Subtract to find the difference.

Step 4: Bring down the next digit from the dividend.

Step 5: Repeat until all digits have been used. Any leftover is the **remainder (R)**.

Check your work: quotient \times divisor + remainder = dividend. If $1,568 \div 16 = 98$, then $98 \times 16 = 1,568$.

✓

Try It: Solve $952 \div 14$.

Check your thinking: $68 (14 \times 68 = 952, \text{ no remainder})$



Task 7: Long Division Lab

Divide 4-digit numbers by 2-digit numbers · Page 1 of 2

Directions: Solve each problem. Stack the numbers in the work space and show all your steps.

1. Solve: $84 \div 4$

Answer: _____

2. Solve: $156 \div 12$

Answer: _____

3. Solve: $234 \div 18$

Answer: _____

4. Solve: $672 \div 14$

Answer: _____

5. Solve: $945 \div 15$

Answer: _____

6. Solve: $1,568 \div 16$

Answer: _____

Task 7: Long Division Lab

Divide 4-digit numbers by 2-digit numbers · Page 2 of 2

Directions (continued): Finish Task 7 with problems 7–12.

7. Solve: $2,436 \div 21$

Answer: _____

8. Solve: $3,744 \div 24$

Answer: _____

9. Solve: $957 \div 15$

Answer: _____

10. Word Problem: 1,472 books are split equally among 32 classrooms. How many books per classroom?

Answer: _____

11. Word Problem: A baker has 1,845 cookies to pack into boxes of 15. How many full boxes, and how many cookies left over?

Answer: _____

12. Error Analysis: A student divided $480 \div 12$ and got 4. Explain the mistake.

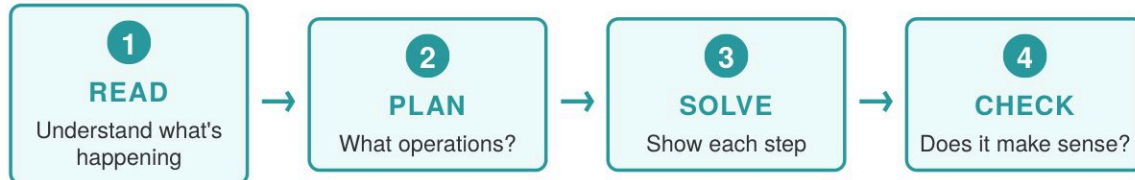
Answer: _____

TASK 8 · WORKED EXAMPLE

Word Problem Workout

Multi-step multiplication and division word problems · 5.NBT.B.5–6

Multi-step word problems require **two or more operations**. Read the problem carefully, identify what you know and what you need to find, and plan your steps BEFORE you calculate. Show each step — don't try to do it all in your head.



Read: Understand: A store sells 24 books per day. After 15 days, they split the books equally into 9 boxes. How many books per box?

Plan: Step A: Find total books. $24 \times 15 = ?$ Step B: Divide by 9. $\text{Total} \div 9 = ?$

Solve: Step A: $24 \times 15 = \mathbf{360 \text{ books}}$. Step B: $360 \div 9 = \mathbf{40 \text{ books per box}}$.

Check: Does the answer make sense? $40 \times 9 = 360 \checkmark$. Yes — reasonable for a store.

Keywords help. “In all,” “total,” “altogether” often mean multiply or add. “Each,” “split equally,” “per” often mean divide. But always check the actual meaning — keywords are a hint, not a rule.

Try It: A farmer picks 85 apples per day for 14 days. She packs them into bags of 6. How many full bags does she make?

Check your thinking: $85 \times 14 = 1,190$ apples. $1,190 \div 6 = 198$ full bags (with 2 apples left over).



Task 8: Word Problem Workout

Multi-step multiplication and division word problems · Page 1 of 2

Directions: Complete each problem. Show your work in the box and write your final answer on the line.

1. A theater sold 127 tickets per show for 15 shows. How many tickets in total?

Answer: _____

2. A school ordered 24 boxes of pencils. Each box has 144 pencils. How many pencils total?

Answer: _____

3. A factory makes 1,248 toys. They pack them equally into 16 crates. How many toys per crate?

Answer: _____

4. A library has 3,456 books split equally onto 24 shelves. Books per shelf?

Answer: _____

5. A bakery sells 48 cupcakes per hour for 12 hours a day. How many cupcakes per day?

Answer: _____

6. If a bakery sells 576 cupcakes per day, how many in a week (7 days)?

Answer: _____

TASK 10 · WORKED EXAMPLE

Operations Mix-Up

Choose the right operation in real-world scenarios · 5.NBT.B.5–6

The hardest part of word problems isn't the math — it's **choosing the right operation**. Use these mental cues: **MULTIPLY** when you have equal groups and need a total. **DIVIDE** when you have a total and need to split it or find a rate. **ADD** when combining. **SUBTRACT** when finding a difference or what's left.

× **MULTIPLY:** equal groups → total ("24 boxes × 18 each = ?")

÷ **DIVIDE:** total → equal groups or rate ("Split 480 into 12 piles = ?")

+ **ADD:** combining amounts ("Had 48, got 37 more = ?")

− **SUBTRACT:** difference or what's left ("Had \$100, spent \$37 = ?")

Step 1: Read the whole problem before choosing an operation.

Step 2: Identify: "groups of," "each," or "per" → multiply OR divide.

Step 3: If the total is known and you're splitting equally → **divide**.

Step 4: If groups are known and you want a total → **multiply**.

Step 5: Combine amounts → **add**. Find difference or what's left → **subtract**.

Watch out for two-step problems. Sometimes you need to multiply AND divide, or add AND multiply. Ask yourself: "What do I need BEFORE I can answer the final question?"

Try It: A box has 12 pencils. A school orders 24 boxes. If pencils are shared equally among 16 classrooms, how many pencils per classroom?

Check your thinking: $12 \times 24 = 288$ pencils total; $288 \div 16 = 18$ pencils per classroom.



Task 10: Operations Mix-Up

Choose the right operation in real-world scenarios · Page 1 of 2

Directions: Complete each problem. Show your work in the box and write your final answer on the line.

1. A store has 12 boxes. Each box has 36 crayons. How many crayons total? Which operation?

Answer: _____

2. A teacher splits 156 stickers equally among 12 students. How many per student? Which operation?

Answer: _____

3. Maya has 48 red marbles and 37 blue. How many altogether? Which operation?

Answer: _____

4. A library had 1,240 books and lost 85. How many left? Which operation?

Answer: _____

5. A bus holds 45 students. How many buses for 675 students? Which operation?

Answer: _____

6. A farmer has 15 rows with 32 plants each. How many plants total? Which operation?

Answer: _____

Task 10: Operations Mix-Up

Choose the right operation in real-world scenarios · Page 2 of 2

Directions (continued): Finish Task 10 with problems 7–12.

7. A recipe calls for 3 cups of flour. How much flour for 24 batches? Which operation?

Answer: _____

8. A class collected \$640 and wants to buy \$8 books for everyone. How many books can they buy? Which operation?

Answer: _____

9. Tomás had \$125. He spent \$47. Then he earned \$30. How much does he have now?

Answer: _____

10. Word Problem: A store has 24 shelves with 18 books each. They sell 125 books. How many left?

Answer: _____

11. Word Problem: A factory makes 1,500 toys a day for 5 days. They pack them in boxes of 25. How many boxes?

Answer: _____

12. Explain: Why is reading the WHOLE problem before picking an operation so important?

Answer: _____