Frequently Asked Questions

Q: **What strategies can you use to multiply one-digit numbers?**

A: You can skip count up or down, use doubling or halving, or relate facts to each other in other ways.

For example, to calculate 9×8, you can:
- calculate 8×8 and count up 8
- calculate 8×10 and count down 8
- double 9×4 or double 9×2 twice
- use the pattern for the 9s facts: the tens digit is $8 - 1$ and the ones digit is $10 - 8$

Q: **How can you multiply by multiples of tens, hundreds, or thousands?**

A: You can multiply the front digits and then adjust the answer to tens, hundreds, or thousands.

For example, 3×2000 is 3×2 thousands, or 6000. Similarly, 40×70 is 40×7 tens, which is 280 tens, or 2800.

Q: **How can you simplify a calculation using the half/double strategy?**

A: If possible, halve or double one of the numbers you are multiplying to make it 10, 100, or 1000. Then do the opposite to the other number.

For example,
$68 \times 50 = (68 \div 2) \times (50 \times 2)$
$68 \times 50 = 34 \times 100$
$68 \times 50 = 3400$

Practice

1. Calculate each product using a different strategy. Explain your strategy for one answer.

    a) 3×5 b) 7×6 c) 4×9 d) 7×9

2. Juice drinks are sold in packs of three. How many juice drinks are in six packs?

3. Calculate each product, and describe the strategy you used.

    a) 8×9 b) 5×8 c) 7×8 d) 7×4

4. Ami bought eight plates of sushi like the one shown. How many pieces of sushi did she buy?

5. Show that $40 \times 60 = 2400$.

6. Calculate.

    a) 30×60
    b) 5×800
    c) 40×90
    d) 8×2000
    e) 3×900
    f) 10×300

7. A bank teller has 18 $100 bills in a cash drawer. What is the total value of the bills?

8. Rewrite each equation using the half/double strategy. Then calculate.

    a) $50 \times 12 = m$
    b) $n = 5 \times 36$
    c) $p = 16 \times 500$
    d) $25 \times 16 = q$

9. Carolyn babysat for 38 h over the summer. She earned $5 an hour. How much did she earn over the summer?

Communication Tip

You can use the symbol "h" to represent hours. For example, you can write "5 h" instead of "five hours."