

I. PATTERNS Multiplying: When multiplying numbers ending in zeroes, multiply the non-zero numbers. Then attach one zero in the answer for each zero in the factors.

Examples) $10 \times 10 = 100$ $20 \times 60 = 1,200$ $40 \times 500 = 20,000$

Problem 1) $40 \times 6 =$

- a) Multiply NON-ZERO digits _____ x _____ = _____
- b) How many zeroes are there to attach? _____
- c) Attach zeroes to the answer from "a" $40 \times 6 =$ _____

Problem 2) $30 \times 700 =$

- a) Multiply NON-ZERO digits _____ x _____ = _____
- b) How many zeroes are there to attach? _____
- c) Attach zeroes to answer in "a" $30 \times 700 =$ _____

Problem 3) $1200 \times 300 =$

- a) Multiply NON-ZERO digits _____
- b) Count zeroes and attach _____
- c) $1200 \times 300 =$ _____

Problem 4) $50 \times 80 =$ _____

Problem 5) $90 \times 70 =$ _____

Problem 6) $60 \times n = 12,000$

- Ask yourself "6 times what is 12?" _____
- How many zeroes are in the product? _____
- How many zeroes did you start with? _____
- How many more zeroes do you need? _____

$60 \times$ _____ $= 12,000$

Problem 7) $20 \times a = 8,000$ $a =$ _____

Problem 8) $30 \times b = 6,000$ $b =$ _____

Problem 9) $20,000 \times c = 18,000,000$ $c =$ _____

**Problem 10) $7,000 \times 2 \times 200 =$ _____

YOUR HOMEWORK IS THIS WAY



NAME: _____ Sept
MATH HOMEWORK Mental Math Technique called "PATTERNS"

Solve mentally using "PATTERNS" learned today in class. See your notes for help if you need.

1) $30 \times 50 =$ _____

2) $600 \times 30 =$ _____ 3) $50 \times 6 =$ _____ 4) $20 \times 700 =$ _____

5) $50 \times 13 \times 2 =$ _____

6) Find the missing value for "t" using a mental math technique:

$40 \times t = 16,000$ answer $t =$ _____

7) $30 \times m = 1,500$ answer $m =$ _____

8) $500 \times 400 =$ _____ 9) $20 \div 240 =$ _____

10) $10,000 \times 120 =$ _____

11) There are 60 people in a company and each person earns \$12,000. How much do they earn altogether?
Write the equation (number sentence) that matches the problem, then solve mentally.

12) There were 30 cars each worth \$90,000. How much were the cars worth altogether?
Write the equation (number sentence) that matches the problem, then solve mentally.

13) Which property is shown below?

$(1 + 2) + 8 + 9 = 1 + 2 + (8 + 9)$ _____

14) There were 20 bicycles each worth \$5,000. How much were the bikes worth altogether?
Write the equation (number sentence) that matches the problem, then solve mentally.

15) IF you did not get 80% or higher on last night's M300 (Math Links) Property Math Potato, you must do it again tonight until you get at least 80%

**Go to HOFFKIDS.com, go to Zone 4 called MATH LINKS, then go to M300.
Make sure you see YOUR CERTIFICATE at the end. That is how you know you finished it (Mr. Hoffman gets an email each time a student finishes)
Repeat this interactive assignment until you get at least an 80%.**