More Helpful Strategies for Multiplying Larger Numbers

Using what you know:

3 x 23 = (3 x 25) - (3 x 2) = 75 - 6 or 69

9 x 23 = (10 x 23) - 23 = 230 - 23 or 207

Double and half:

4 x 240 = 8 x 120 = 960

16 x 24 = 8 x 48 = 320 + 64 = 384

Five is half of ten:

5 x 23 = (10 x 23) ÷ 2 = 230 ÷ 2 = 115

Four is double double:

32 x 4 = Double Double 32 or **(32 x 2) x 2 = 64 x 2 or 128**

8 x 32 = Double Double Double **32 or (32 x 2) x 2 x 2 = 256**

Pembina Trails
School Division

Computation Strategies
Grade Four Mathematics

Accomplish Anything

Describe and apply strategies for multiplication and division of larger numbers.

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For more information and helpful resources, visit: www.pembinatrails.ca

Understanding math is the key ...

A variety of strategies are introduced and practiced through the early years. Our goal is for students to understand and apply many kinds of math reasoning.

Did you know ...

- **Math strategies are the foundations for algebraic thinking** - a fundamental part of mathematics in middle and senior years.

- Using strategies helps students to think logically and make sense of mathematics.

- Having students communicate their thinking deepens their understanding.
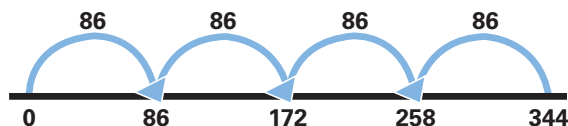
Multiplication Strategies

Division Strategies

Partitioning/Place Value

Distributive Property:

$$4 \times 86 = (4 \times 80) + (4 \times 6)$$
$$320 \ + \ 24$$
$$344$$

Fair Shares:

$$92 \div 4 = (80 + 12) \div 4$$
$$20 + 3$$
$$23$$

Repeated Addition or Subtraction

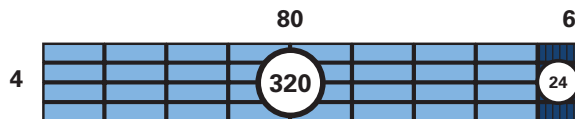$$4 \times 86 = 86 + 86 + 86 + 86$$

Skip counting may also work for certain numbers:
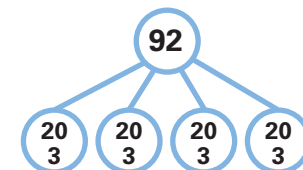$15 \times 5 = 15, 30, 45, 60, \underline{75}$.

$92 \div 4$

3 groups of 4   10 groups of 4   10 groups of 4
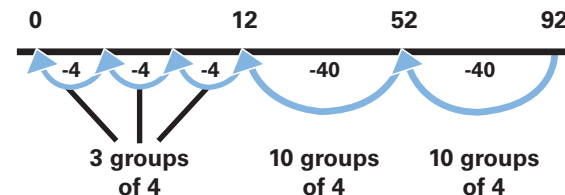
$\underline{23}$ groups of 4

Visual Models

4×86

$320 + 24 = 344$

$92 \div 4$

4 groups of $\underline{23}$