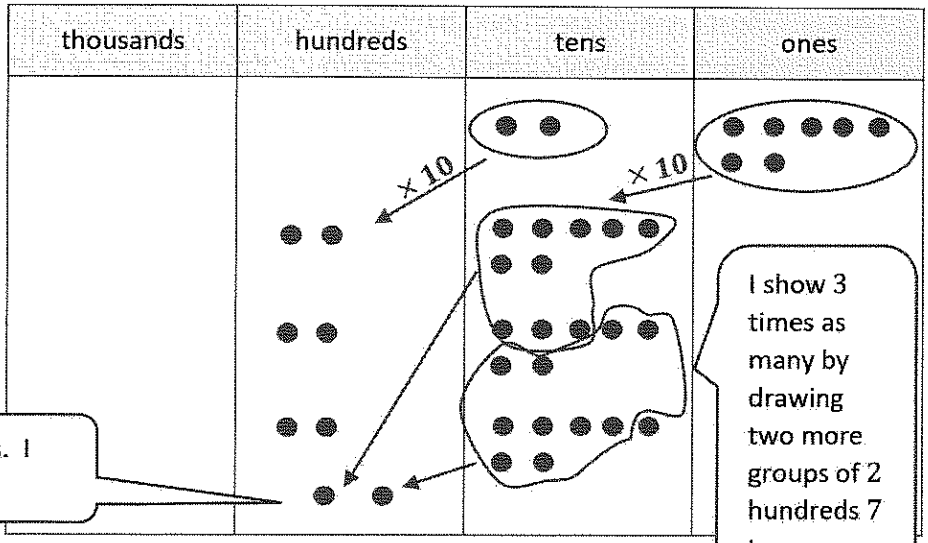
# G4-M3-Lesson 34

1. Use the associative property to rewrite each expression. Solve using disks, and then complete the number sentences.

I rename 30 as (3 × 10), and then I group the factor of 10 with 27.

I draw 2 tens 7 ones. I show 10 times as many by shifting the disks one place to the left.

$30 \times 27$
$= (3 \times 10) \times 27$
$= 3 \times (10 \times 27)$
$= 810$

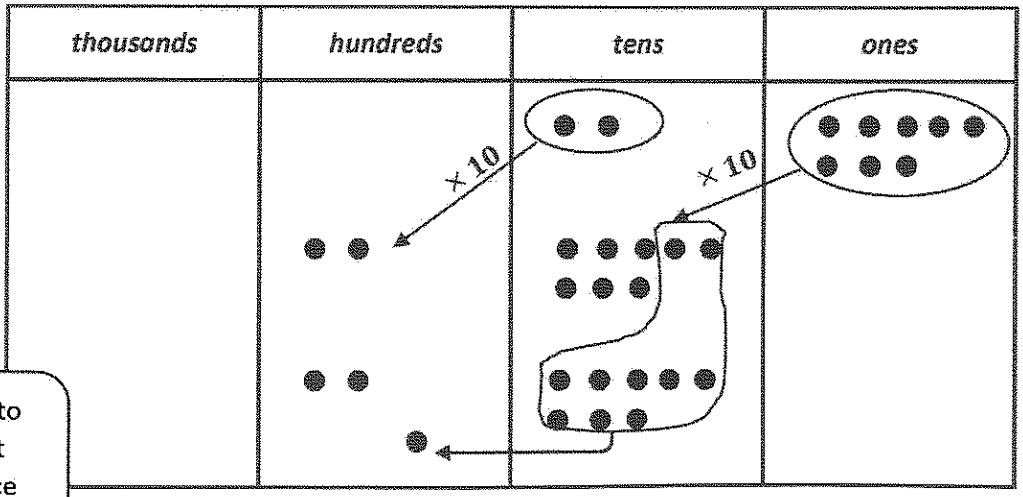



I compose 20 tens as 2 hundreds. I have 8 hundreds 1 ten.

I show 3 times as many by drawing two more groups of 2 hundreds 7 tens.

2. Use the associative property and place value disks to solve.

$20 \times 28$
$= (2 \times 10) \times 28$
$= 2 \times (10 \times 28)$
$= 560$




By decomposing 20 into 2 and 10, I think about the product being twice as much as 28 tens.

3. Use the associative property without place value disks to solve.

$60 \times 54$
$= (6 \times 10) \times 54$
$= 6 \times (10 \times 54)$
$= 3,240$

$$\begin{array}{r} 5\ 4\ 0 \\ \times \quad\ 6 \\ \hline 3,\ 2\ 4\ 0 \end{array}$$

I rename 60 as $6 \times 10$. Ten times as many as 54 ones is 54 tens. I multiply 6 times 540.

4. Use the distributive property to solve the following. Distribute the second factor.

$40 \times 56$
$= (40 \times 50) + (40 \times 6)$
$= 2,000 + 240$
$= 2,240$

I use unit language to help me solve mentally. Four tens times 5 tens is 20 hundreds. And 4 tens times 6 ones is 24 tens.