Shortcut Method for Multiplying 6, 7, 8 and 9

1 $6 \times 6 = ?$
Start with 5 groups of 6.
$5 \times 6 = 30$

6×6 is 6 groups of 6.
It is '1 group of 6' more than '5 × 6'.
$6 \times 6 = 30 + 6$
$\qquad = 36$

> 6×6 is the same as adding 1 group of 6 to 30.

2 $6 \times 7 = ?$
6×7 is 6 groups of 7.

It is '1 group of ___7___ ' more than '5 × 7'.

$6 \times 7 = $ ___35___ $+$ ___7___

$\qquad = $ ___42___

> Start with 5 groups of ___7___ .
> $5 \times$ ___7___ $= $ ___35___

3 $7 \times 9 = ?$
7×9 is 7 groups of 9.
It is '2 groups of 9' more than '5 × 9'.

$7 \times 9 = 45 + \boxed{} + \boxed{}$

$\qquad = \boxed{}$

> Start with $\boxed{}$ groups of 9.
> $\boxed{} \times 9 = 45$

4 $9 \times 7 = ?$

Start with 10 groups of 7.

$10 \times 7 = 70$

$9 \times 7 = 70 - 7$
$\qquad = 63$

9×7 is the same as taking away 1 group of 7 from 70.

5 $9 \times 9 = ?$

9×9 is 9 groups of 9.

$9 \times 9 = \boxed{} - \boxed{}$

$\qquad = \boxed{}$

Start with $\boxed{}$ groups of 9.

$\boxed{} \times 9 = \boxed{90}$