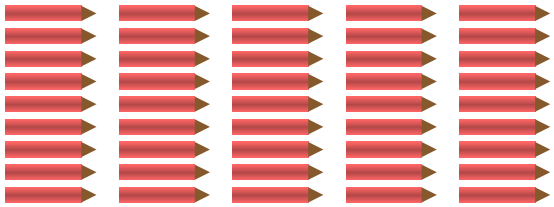
TIMES TABLES

A TIMES TABLES

Discover: Each box can hold 9 pencils, and there are 5 boxes ready to be filled.
Hugo wants to find out the total number of pencils needed to fill all the boxes.
Can you help Hugo?



Answer: Hugo starts by adding 9 five times, like this:

$$9+9+9+9+9$$

However, this takes time. Instead, he uses the times table for a quicker method.

$5 \times 0 = 0$
$5 \times 1 = 5$
$5 \times 2 = 10$
$5 \times 3 = 15$
$5 \times 4 = 20$

As $5 \times 5 = 25$, $5 \times 9 = 45$.

$5 \times 6 = 30$
$5 \times 7 = 35$
$5 \times 8 = 40$
$5 \times 9 = 45$
$5 \times 10 = 50$

So, Hugo will need 45 pencils to fill all the boxes. This example shows why learning the times table is helpful.

Definition **Times Table**

A **Times Table** is a list that shows the results of multiplying one number by the numbers from 0 to 10.

Ex: Calculate 4×9 given the times table of 4

$4 \times 0 = 0$
$4 \times 1 = 4$
$4 \times 2 = 8$
$4 \times 3 = 12$
$4 \times 4 = 16$
$4 \times 5 = 20$
$4 \times 6 = 24$
$4 \times 7 = 28$
$4 \times 8 = 32$
$4 \times 9 = 36$
$4 \times 10 = 40$

Answer: In the times table of 4, we find $4 \times 9 = 36$.

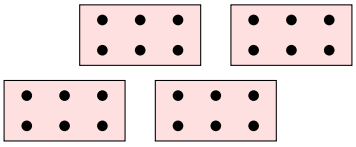
B TIMES TABLE OF 2 3 4 5 10

Proposition Times Table of 2 3 4 5 10

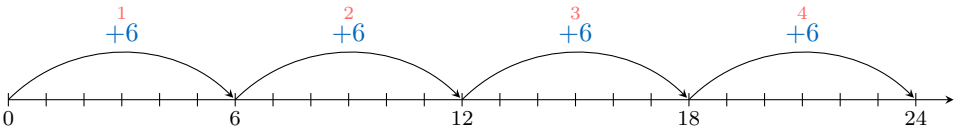
$2 \times 0 = 0$	$3 \times 0 = 0$	$4 \times 0 = 0$	$5 \times 0 = 0$	$10 \times 0 = 0$
$2 \times 1 = 2$	$3 \times 1 = 3$	$4 \times 1 = 4$	$5 \times 1 = 5$	$10 \times 1 = 10$
$2 \times 2 = 4$	$3 \times 2 = 6$	$4 \times 2 = 8$	$5 \times 2 = 10$	$10 \times 2 = 20$
$2 \times 3 = 6$	$3 \times 3 = 9$	$4 \times 3 = 12$	$5 \times 3 = 15$	$10 \times 3 = 30$
$2 \times 4 = 8$	$3 \times 4 = 12$	$4 \times 4 = 16$	$5 \times 4 = 20$	$10 \times 4 = 40$
$2 \times 5 = 10$	$3 \times 5 = 15$	$4 \times 5 = 20$	$5 \times 5 = 25$	$10 \times 5 = 50$
$2 \times 6 = 12$	$3 \times 6 = 18$	$4 \times 6 = 24$	$5 \times 6 = 30$	$10 \times 6 = 60$
$2 \times 7 = 14$	$3 \times 7 = 21$	$4 \times 7 = 28$	$5 \times 7 = 35$	$10 \times 7 = 70$
$2 \times 8 = 16$	$3 \times 8 = 24$	$4 \times 8 = 32$	$5 \times 8 = 40$	$10 \times 8 = 80$
$2 \times 9 = 18$	$3 \times 9 = 27$	$4 \times 9 = 36$	$5 \times 9 = 45$	$10 \times 9 = 90$
$2 \times 10 = 20$	$3 \times 10 = 30$	$4 \times 10 = 40$	$5 \times 10 = 50$	$10 \times 10 = 100$

C TIMES TABLE OF 6

Discover: How many dots are there?



Answer: You can count by 6s: 6, 12, 18, 24 dots.



There are $4 \times 6 = 6 + 6 + 6 + 6 = 24$ dots.

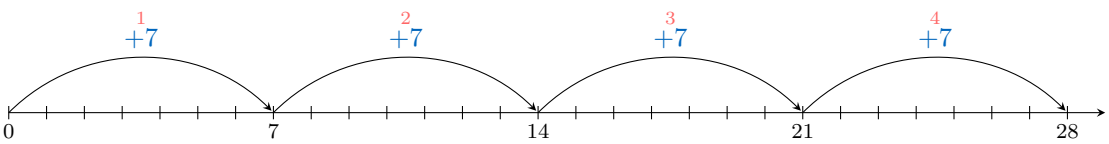
Proposition Times Table of 6

$6 \times 0 = 0$	$0 \times 6 = 0$
$6 \times 1 = 6$	$1 \times 6 = 6$
$6 \times 2 = 12$	$2 \times 6 = 12$
$6 \times 3 = 18$	$3 \times 6 = 18$
$6 \times 4 = 24$	$4 \times 6 = 24$
$6 \times 5 = 30$	$5 \times 6 = 30$
$6 \times 6 = 36$	$6 \times 6 = 36$
$6 \times 7 = 42$	$7 \times 6 = 42$
$6 \times 8 = 48$	$8 \times 6 = 48$
$6 \times 9 = 54$	$9 \times 6 = 54$
$6 \times 10 = 60$	$10 \times 6 = 60$

D TIMES TABLE OF 7

Discover: There are 7 days in a week.How many days are there in 4 weeks?

Answer: You can count by 7s: 7, 14, 21, 28 days.



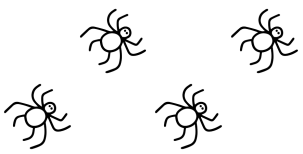
There are $4 \times 7 = 7 + 7 + 7 + 7 = 28$ days.

Proposition **Times Table of 7**

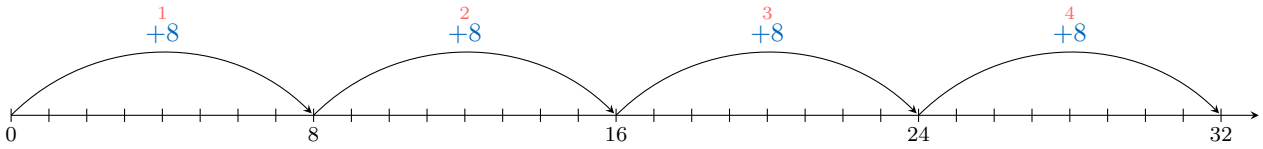
$7 \times 0 = 0$	$0 \times 7 = 0$
$7 \times 1 = 7$	$1 \times 7 = 7$
$7 \times 2 = 14$	$2 \times 7 = 14$
$7 \times 3 = 21$	$3 \times 7 = 21$
$7 \times 4 = 28$	$4 \times 7 = 28$
$7 \times 5 = 35$	$5 \times 7 = 35$
$7 \times 6 = 42$	$6 \times 7 = 42$
$7 \times 7 = 49$	$7 \times 7 = 49$
$7 \times 8 = 56$	$8 \times 7 = 56$
$7 \times 9 = 63$	$9 \times 7 = 63$
$7 \times 10 = 70$	$10 \times 7 = 70$

E TIMES TABLE OF 8

Discover: A spider has 8 legs. How many legs do 4 spiders have?



Answer: You can count by 8s: 8, 16, 24, 32 legs.



There are $4 \times 8 = 8 + 8 + 8 + 8 = 32$ legs.

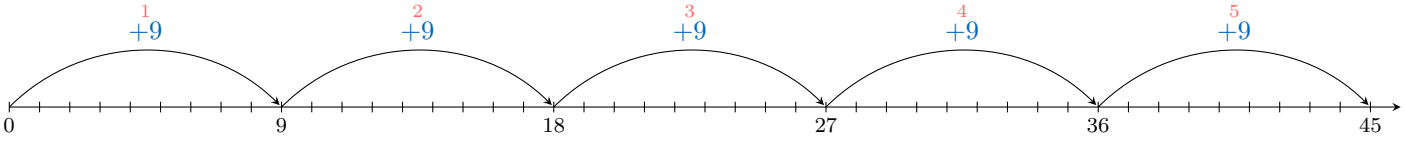
Proposition **Multiplication table 8**

$8 \times 0 = 0$	$0 \times 8 = 0$
$8 \times 1 = 8$	$1 \times 8 = 8$
$8 \times 2 = 16$	$2 \times 8 = 16$
$8 \times 3 = 24$	$3 \times 8 = 24$
$8 \times 4 = 32$	$4 \times 8 = 32$
$8 \times 5 = 40$	$5 \times 8 = 40$
$8 \times 6 = 48$	$6 \times 8 = 48$
$8 \times 7 = 56$	$7 \times 8 = 56$
$8 \times 8 = 64$	$8 \times 8 = 64$
$8 \times 9 = 72$	$9 \times 8 = 72$
$8 \times 10 = 80$	$10 \times 8 = 80$

F TIMES TABLE OF 9

Discover: There are 9 players in a baseball team.How many players are there in 5 teams?

Answer: You can count by 9s: 9, 18, 27, 36, 45 players.



There are $5 \times 9 = 9 + 9 + 9 + 9 + 9 = 45$ players.

Proposition **Multiplication table 9**

$9 \times 0 = 0$ $\quad$ $0 \times 9 = 0$
$9 \times 1 = 9$ $\quad$ $1 \times 9 = 9$
$9 \times 2 = 18$ $\quad$ $2 \times 9 = 18$
$9 \times 3 = 27$ $\quad$ $3 \times 9 = 27$
$9 \times 4 = 36$ $\quad$ $4 \times 9 = 36$
$9 \times 5 = 45$ $\quad$ $5 \times 9 = 45$
$9 \times 6 = 54$ $\quad$ $6 \times 9 = 54$
$9 \times 7 = 63$ $\quad$ $7 \times 9 = 63$
$9 \times 8 = 72$ $\quad$ $8 \times 9 = 72$
$9 \times 9 = 81$ $\quad$ $9 \times 9 = 81$
$9 \times 10 = 90$ $\quad$ $10 \times 9 = 90$

G TIMES TABLES FROM 1 TO 10

Proposition **Times Tables to 10**

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100