$\qquad$

## 4 as a Factor

If you know a 2s multiplication fact, you can find a 4s multiplication fact.

4s Facts

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

You can double a 2 s fact or add a 2 s fact by itself to find a 4s fact.

Find $4 \times 3$ by doubling a 2 s fact.
a. Find a 2 s fact with 3 as a factor.

$$
2 \times 3=6
$$

b. Double it.
$2 \times 6=12$

When you double an array of $2 \times 1$, you get an array of $4 \times 1$.
(2)


Find $4 \times 3$ by adding a 2 s fact by itself.
a. Find a 2 s fact with 3 as a factor.

$$
2 \times 3=6
$$

b. Add the fact to itself.

$$
6+6=12
$$

Find each product.

1. $4 \times 6$
2. $8 \times 4$
3. $4 \times 5$
4. $9 \times 4$
5. $4 \times 1$
6. $4 \times 3$
7. $4 \times 7$
8. $12 \times 2$
9. $0 \times 4$
10. $4 \times 4$
$\qquad$
11. Reason How can you use $2 \times 8$ to find $4 \times 8$ ?
