

Multiplying by Multiples of 10 and 100

Patterns can help you multiply by numbers that are multiples of 10 or 100.

$3 \times 5 = 15$

$2 \times 4 = 8$

$5 \times 7 = 35$

$3 \times 50 = 150$

$2 \times 40 = 80$

$5 \times 70 = 350$

$3 \times 500 = 1,500$

$2 \times 400 = 800$

$5 \times 700 = 3,500$

To find each of the products above, first complete the basic multiplication fact, then write the same number of zeros seen in the factor that is a multiple of 10. For example:

$3 \times 500 = 1,500$

First find 3×5 .

$3 \times 5 = 15$

Then, count the number of zeros in the multiple of 10.

500 has 2 zeros.

Write 2 zeros to form the product.

$1,500$

Find each product. Use mental math.

1. $8 \times 80 =$ _____

2. $6 \times 60 =$ _____

3. $7 \times 90 =$ _____

4. $5 \times 200 =$ _____

5. $3 \times 40 =$ _____

6. $7 \times 200 =$ _____

7. $500 \times 6 =$ _____

8. $600 \times 9 =$ _____

9. $3 \times 800 =$ _____

10. $600 \times 7 =$ _____

11. Number Sense To find 8×600 , multiply 8 and 6, then write ___ zeros to form the product.