## Expanded Multiplication

I can multiply two-digit by one-digit numbers using expanded multiplication.

Example:
$64 \times 5=\underline{\mathbf{3 2 0}}$

| $\times$ | 60 | 4 |
| :---: | :---: | :---: |
| 5 | 300 | 20 |

$300+20=320$

## Questions:

1. $28 \times 3=$ $\qquad$

|  | H | T | O |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  | 6 | 4 |
| $\times$ |  |  |  |
|  |  | 5 |  |
|  |  | 2 | 0 |
|  | $(4 \times 5)$ |  |  |
|  | 3 | 0 | 0 |
| 3 | 2 | 0 |  |


| $\times$ | 20 | 8 |
| :---: | :---: | :---: |
| 3 |  |  |


| H | T | 0 |
| :---: | :---: | :---: |
|  | 2 | 8 |
| $\times$ |  | 3 |
|  |  |  |

2. $74 \times 5=$ $\qquad$

| $\times$ | 70 | 4 |
| :---: | :---: | :---: |
| 5 |  |  |


|  | H | T | O |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  | 7 | 4 |  |
| $\times$ |  | 5 |  |
|  |  |  |  |
|  |  |  | $(4 \times 5)$ |
|  |  |  |  |
|  |  |  | $\times 5)$ |

3. $47 \times 4=$ $\qquad$

| $\times$ | 40 | 7 |
| :---: | :---: | :---: |
| 4 |  |  |


|  | H | T | O |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  | 4 | 7 |  |
| $\times$ |  | 4 |  |
|  |  |  |  |
|  |  |  | $(7 \times 4)$ |
|  |  |  |  |
|  |  |  |  |

Expanded Multiplication
4. $36 \times 3=$ $\qquad$

$(6 \times 3)$
$(30 \times 3)$
6. $82 \times 5=$ $\qquad$

| H | T | 0 |
| :---: | :---: | :---: |
|  | 8 | 2 |
| $\times$ |  | 5 |
|  |  |  |

8. $24 \times 8=$ $\qquad$
$(4 \times 8)$
9. $74 \times 4=$ $\qquad$
$\begin{array}{lll}\mathrm{H} & \mathrm{T} & \mathrm{O}\end{array}$
$7 \quad 4$
$\times$
$\qquad$
$(4 \times 4)$ $(70 \times 4)$
10. $63 \times 6=$ $\qquad$

| H | T | O |
| :--- | :--- | :--- |
|  | 6 | 3 |

$\times$
6
$(3 \times 6)$
$\qquad$ $(60 \times 6)$
9. $61 \times 9=$ $\qquad$
10. $78 \times 7=$ $\qquad$
$\times$
$(1 \times 9)$
$(60 \times 9)$


## Expanded Multiplication

I can multiply two-digit by one-digit numbers using expanded multiplication.

1. $82 \times 5=$ $\qquad$

|  | H | T | O |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| $\times$ |  | 2 |  |
| $\times$ |  | 5 |  |

2. $63 \times 6=$ $\qquad$

| H | T | O |
| :---: | :---: | :---: |
|  | 6 | 3 |
| $\times$ |  | 6 | $(3 \times 6)$

$(60 \times 6)$
3. $24 \times 8=$

| H | T | 0 |
| :---: | :---: | :---: |
|  | 2 | 4 |
| $\times$ |  | 8 |
|  |  |  |

4. $61 \times 9=$ $\qquad$

| H | T | O |
| :--- | :--- | :--- |
|  | 6 | 1 |

$\times$ 9
$(1 \times 9)$
$\qquad$ $(60 \times 9)$
5. $78 \times 7=$ $\qquad$

6. $87 \times 9=$ $\qquad$
$\begin{array}{lll}\mathrm{H} & \mathrm{T} & \mathrm{O}\end{array}$
$\times$ $\qquad$
$\qquad$

Expanded Multiplication
7. $92 \times 8=$

$$
\begin{array}{lll}
\mathrm{H} & \mathrm{~T} & \mathrm{O}
\end{array}
$$

×
$\qquad$
9. $98 \times 8=$ $\qquad$
H T O
$\times$
$\qquad$
$\qquad$
11. $88 \times 8=$ $\qquad$

$$
\begin{array}{lll}
\mathrm{H} & \mathrm{~T} & \mathrm{O}
\end{array}
$$

$\times$ $\qquad$
$\qquad$

## Expanded Multiplication

I can multiply two-digit by one-digit numbers using expanded multiplication.

1. $24 \times 8=$ $\qquad$

$\qquad$
2. $78 \times 7=$ $\qquad$
$\qquad$ $(8 \times 7)$
$(70 \times 7)$
3. $61 \times 9=$ $\qquad$

| H | T | O |
| :---: | :---: | :---: |
|  | 6 | 1 |
| $\times$ |  |  |

$(1 \times 9)$
$(60 \times 9)$
4. $87 \times 9=$ $\qquad$
$\begin{array}{lll}\mathrm{H} & \mathrm{T} & \mathrm{O}\end{array}$
$\times$ $\qquad$
$\qquad$
5. $92 \times 8=$ $\qquad$

$$
\begin{array}{lll}
\mathrm{H} & \mathrm{~T} & \mathrm{O}
\end{array}
$$

$\times$ $\qquad$
6. $85 \times 7=$ $\qquad$
H
T
0
$\times$ $\qquad$
$\qquad$

## Expanded Multiplication

7. $98 \times 8=$ $\qquad$ $\begin{array}{lll}\mathrm{H} & \mathrm{T} & \mathrm{O}\end{array}$
$\times$
$\qquad$
8. $88 \times 8=$ $\qquad$
$\begin{array}{lll}\mathrm{H} & \mathrm{T} & \mathrm{O}\end{array}$
$\times$ $\qquad$
$\qquad$

Use expanded multiplication to solve these problems.

1. Isamu had 29 sheets of stickers. Each sheet contained eight stickers. How many stickers did he have in total?
2. Lucy fetched five packs of pens from the school office. If each pack contained 24 pens, how many pens did she have?
3. Skyla had 46 boxes of eggs. If each box contained six eggs, how many eggs did she have altogether?

## Expanded Multiplication Answers

1. $28 \times 3=84$
2. $82 \times 5=410$
3. $74 \times 5=370$
4. $63 \times 6=378$
5. $47 \times 4=188$
6. $24 \times 8=192$
7. $36 \times 3=108$
8. $61 \times 9=549$
9. $74 \times 4=296$
10. $78 \times 7=746$
11. $82 \times 5=410$
12. $92 \times 8=736$
13. $63 \times 6=378$
14. $85 \times 7=595$
15. $24 \times 8=192$
16. $98 \times 8=784$
17. $61 \times 9=549$
18. $75 \times 6=450$
19. $78 \times 7=546$
20. $88 \times 8=704$
21. $87 \times 9=783$
22. $96 \times 6=576$
23. $24 \times 8=192$
24. $61 \times 9=549$
25. $78 \times 7=746$
26. $87 \times 9=783$
27. $92 \times 8=736$
28. $85 \times 7=595$
29. $98 \times 8=784$
30. $75 \times 6=450$
31. $88 \times 8=704$
32. $96 \times 6=576$

## Use expanded multiplication to solve these problems.

1. Isamu had 29 sheets of stickers. Each sheet contained eight stickers. How many stickers did he have in total? $29 \times 8=232$
2. Lucy fetched five packs of pens from the school office. If each pack contained 24 pens, how many pens did she have? $5 \times 24=120$
3. Skyla had 46 boxes of eggs. If each box contained six eggs, how many eggs did she have altogether? $46 \times 6=276$
