$\qquad$ Date

## Distributive Property of Multiplication

We use the distributive property to break apart problems with larger numbers to make them easier to solve.

$$
\begin{aligned}
\text { 1. Break one of the factors apart: } & 4 \times 6 \\
\text { 2. Multiply: } & 4 \times 6=(4 \times 2)+(4 \times 4) \\
\text { 3. Add the Products: } & 4 \times 6=8+16 \ldots \ldots \\
\text { 4. Put a box around the final answer: } & 4 \times 6=24
\end{aligned}
$$

Directions: Solve the following problems using the distributive property of multiplication. For added fun, choose two colors to use as you show your work!

| $8 \times 7$ | $12 \times 3$ |
| :---: | :---: |
| $8 \times 7=(4 \times 7)+(4 \times 7)$ | $12 \times 3=(6 \times 3)+(6 \times 3)$ |
| $8 \times 7=28+28$ | $12 \times 3=18+18$ |
| $8 \times 7=56$ | $12 \times 3=36$ |
| $9 \times 5$ | $14 \times 8$ |
| $9 \times 5=(4 \times 5)+(5 \times 5)$ | $14 \times 8=(10 \times 8)+(4 \times 8)$ |
| $9 \times 5=20+25$ | $14 \times 8=80+32$ |
| $9 \times 5=45$ | $14 \times 8=112$ |
| $15 \times 6$ | $7 \times 11$ |
| $15 \times 6=(5 \times 6)+(10 \times 6)$ | $7 \times 11=(7 \times 5)+(7 \times 6)$ |
| $15 \times 6=30+60$ | $7 \times 11=35+42$ |
| $15 \times 6=90$ | $7 \times 11=77$ |
| $9 \times 6$ | $7 \times 9$ |
| $9 \times 6=(4 \times 6)+(5 \times 6)$ | $7 \times 9=(2 \times 9)+(5 \times 9)$ |
| $9 \times 6=24+30$ | $7 \times 9=18+45$ |
| $9 \times 6=54$ | $7 \times 9=63$ |
| $13 \times 3$ | $8 \times 9$ |
| $13 \times 3=(5 \times 3)+(8 \times 3)$ | $8 \times 9=(8 \times 4)+(8 \times 5)$ |
| $13 \times 3=15+24$ | $8 \times 9=32+40$ |
| $13 \times 3=39$ | $8 \times 9=72$ |

