

Name _____

Date _____

1. Represent the following expressions with disks, regrouping as necessary, writing a matching expression, and recording the partial products vertically.

a. 3×24

b. 3×42

c. 4×34

2. Represent the following expressions with disks, regrouping as necessary. To the right, record the partial products vertically.
- a. 4×27
- b. 5×42
3. Cindy says she found a shortcut for doing multiplication problems. When she multiplies 3×24 , she says, “ 3×4 is 12 ones, or 1 ten and 2 ones. Then there’s just 2 tens left in 24, so add it up and you get 3 tens and 2 ones.” Do you think Cindy’s shortcut works? Explain your thinking in words and justify your response using a model or partial products.