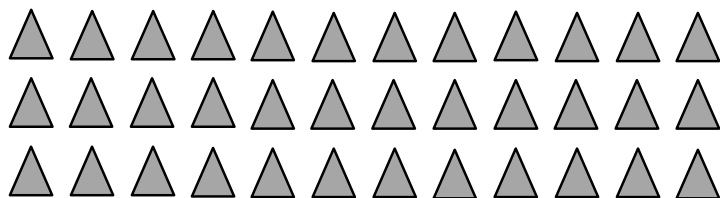


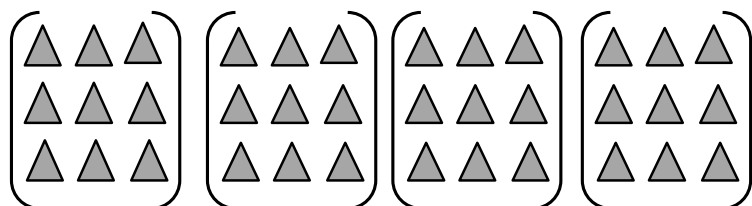
Name _____

Date _____

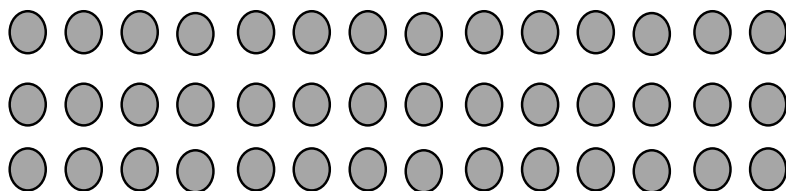
1. Use the array to complete the equation.



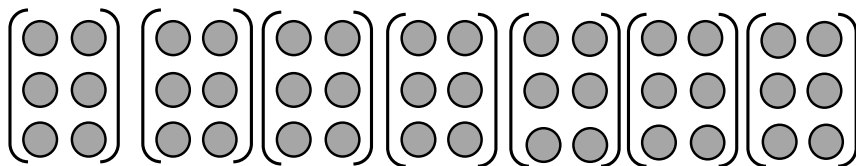
a. $3 \times 12 = \underline{\hspace{2cm}}$



b. $(3 \times 3) \times 4$
 $= \underline{\hspace{2cm}} \times 4$
 $= \underline{\hspace{2cm}}$



c. $3 \times 14 = \underline{\hspace{2cm}}$



d. $(\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) \times 7$
 $= \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$
 $= \underline{\hspace{2cm}}$

2. Place parentheses in the equations to simplify. Then, solve. The first one has been done for you.

a. $3 \times 16 = 3 \times (2 \times 8)$
 $= (3 \times 2) \times 8$
 $= \underline{6} \times 8$

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b. $2 \times 14 = 2 \times (2 \times 7)$
 $= (2 \times 2) \times 7$
 $= \underline{\quad} \times 7$

c. $3 \times 12 = 3 \times (3 \times 4)$
 $= 3 \times 3 \times 4$
 $= \underline{\quad} \times \underline{\quad}$

d. $3 \times 14 = 3 \times 2 \times 7$
 $= 3 \times 2 \times 7$
 $= \underline{\quad} \times \underline{\quad}$

e. $15 \times 3 = 5 \times 3 \times 3$
 $= 5 \times 3 \times 3$
 $= \underline{\quad} \times \underline{\quad}$

f. $15 \times 2 = 5 \times 3 \times 2$
 $= 5 \times 3 \times 2$
 $= \underline{\quad} \times \underline{\quad}$

3. Charlotte finds the answer to 16×2 by thinking about 8×4 . Explain her strategy.