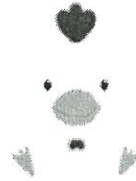


## Maggie's Chickens & Pigs

Solve the following multiplication problems. Label your answer with the correct unit. Use any of the following strategies:

- traditional algorithm
- break apart a number
- ratio tables
- area models



1. Maggie's chickens live in a coop in her backyard. The coop is 18 feet by 16 feet. What is the area of the coop?

10	8
100	80
60	48

$$\begin{array}{r} 100 \\ 80 \\ + 60 \\ 48 \\ \hline 288 \text{ ft}^2 \end{array}$$

$$\begin{array}{r} 10 \times 18 = 180 \\ 6 \times 18 = 108 \\ 6 \cdot 10 = 60 \\ 6 \cdot 8 = 48 \\ \hline 288 \text{ ft}^2 \end{array}$$

2. Maggie is getting several more chickens. She built a new coop in her backyard for the new chickens. This coop is 9 feet by 32 feet. What is the area of the new coop?

30	2
270	18

$$\begin{array}{r} 270 \\ + 18 \\ \hline 288 \text{ ft}^2 \end{array}$$

$$\begin{array}{r} 30 \times 9 = 270 \\ 2 \times 9 = 18 \\ \hline 288 \text{ ft}^2 \end{array}$$

3. Maggie's pig just had a litter of piglets. Maggie built a pen for the piglets. The pen is 15 feet by 22 feet. What is the area of the pen?

10	5
200	100
20	10

$$\begin{array}{r} 200 \\ 100 \\ + 20 \\ 10 \\ \hline 330 \text{ ft}^2 \end{array}$$

$$\begin{array}{r} 15 \times 20 = 300 \\ 15 \times 2 = 30 \\ \hline 330 \text{ ft}^2 \end{array}$$

4. As the piglets grow, they will need more space, so Maggie is building another pen for some of the pigs to move into. This pen is 42 feet by 6 feet. What is the area of this pen?

40	2
240	12

$$\begin{array}{r} 240 \\ + 12 \\ \hline 252 \text{ ft}^2 \end{array}$$

$$\begin{array}{r} 6 \times 40 = 240 \\ 6 \times 2 = 12 \\ \hline 252 \text{ ft}^2 \end{array}$$