Name $\qquad$ Date $\qquad$

1. Fill in the blanks using your knowledge of place value units and basic facts.
a. $43 \times 30$

Think: 43 ones $\times 3$ tens $=$ $\qquad$ tens
$43 \times 30=$ $\qquad$
b. $430 \times 30$

Think: 43 tens $\times 3$ tens $=$ $\qquad$ hundreds
$430 \times 30=$ $\qquad$
c. $830 \times 20$

Think: 83 tens $\times 2$ tens $=166$ $\qquad$
$830 \times 20=$ $\qquad$
d. $4,400 \times 400$
$\qquad$ hundreds $\times$ $\qquad$ hundreds = 176 $\qquad$
$4,400 \times 400=$ $\qquad$
e. $80 \times 5,000$
$\qquad$ tens $\times$ $\qquad$ thousands $=40$ $\qquad$
$80 \times 5,000=$ $\qquad$
2. Determine if these equations are true or false. Defend your answer using your knowledge of place value and the commutative, associative, and/or distributive properties.
a. 35 hundreds $=5$ tens $\times 7$ tens
b. $770 \times 6=77 \times 6 \times 100$
c. 50 tens $\times 4$ hundreds $=40$ tens $\times 5$ hundreds
d. $24 \times 10 \times 90=90 \times 2,400$
3. Find the products. Show your thinking. The first row gives some ideas for showing your thinking.
a. $5 \times 5$
$5 \times 50$
$=25$
$=25 \times 10$
$=250$
$50 \times 50$
$50 \times 500$
$=250$
$=(5 \times 10) \times(5 \times 10)$
$=(5 \times 5) \times(10 \times 100)$
$=(5 \times 5) \times 100$
$=25,000$
$=2,500$
b. $80 \times 5$
$80 \times 50$
$800 \times 500$
$8,000 \times 50$
c. $637 \times 3$
$6,370 \times 30$
$6,370 \times 300$
$63,700 \times 300$
4. A concrete stepping-stone measures 20 square inches. What is the area of 30 such stones?
5. A number is 42,300 when multiplied by 10 . Find the product of this number and 500 .

