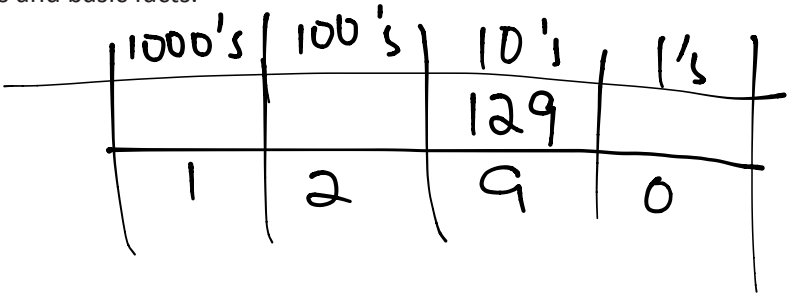
Name _____ Date _____

1. Fill in the blanks using your knowledge of place value units and basic facts.



a. 43 × 30

Think: 43 ones × 3 tens = 129 tens

43 × 30 = 1,290

b. 430 × 30

Think: 43 tens × 3 tens = 129 hundreds

430 × 30 = 12,900

c. 830 × 20

Think: 83 tens × 2 tens = 166 hundreds

830 × 20 = 16,600

d. 4,400 × 400

44 hundreds × 4 hundreds = 176 10,000

4,400 × 400 = 1,760,000

e. 80 × 5,000

8 tens × 5 thousands = 40 10000

80 × 5,000 = 400,000

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 × 7 tens True 5 tens × 7 tens = 5 × 7 × ten × ten = 35 hundreds

b. 770 × 6 = 77 × 6 × 100 False. 770 × 6 = 77 tens × 6 = 77 × 6 × 10 ← not 100

c. 50 tens × 4 hundreds = 40 tens × 5 hundreds True. 40 tens × 5 hundreds
= 10 tens × 4 × 5 hundreds
= 10 tens × 5 × 4 hundreds
= 50 tens × 4 hundreds

d. 24 × 10 × 90 = 90 × 2,400

240 × 90

90 × 240

False

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3. Find the products. Show your thinking. The first row gives some ideas for showing your thinking.

a.	5 × 5 = 25	5 × 50 = 25 × 10 = 250	50 × 50 = (5 × 10) × (5 × 10) = (5 × 5) × 100 = 2,500	50 × 500 = (5 × 5) × (10 × 100) = 25,000
b.	80 × 5 8 × 10 × 5 8 × 5 × 10 40 × 10 = 400	80 × 50 8 × 5 × 10 × 10 40 × 100 4000	800 × 500 8 × 5 × 100 × 100 40 × 1,000 40,000	8,000 × 50 8 × 5 × 1000 × 10 40 × 10,000 400,000
c.	637 × 3 1,911	6,370 × 30 637 × 3 × 10 × 10 1911 × 100 191,100	6,370 × 300 637 × 3 × 10 × 100 1911 × 1,000 1,911,000	63,700 × 300 637 × 3 × 100 × 100 1911 × 10,000 19,110,000

4. A concrete stepping stone measures 20 inches square. What is the area of 30 such tiles?

20 × 30
2 × 3 × 10 × 10
6 × 100
600

600 sq. in.

5. A number is 42,300 when multiplied by 10. Find the product of this number and 500.

4,230 × 10 = 42,300

4,230 × 500
423 × 5 × 10 × 100
2115 × 1,000
2,115,000

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