Name _____ Date _____ Class _____

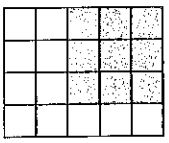
Additional Practice

Investigation 2

Bits and Pieces III

1. Josh and his father are estimating how much gas they will need for a car trip. They know that the car gets 39 miles per gallon. Estimate how many gallons of gas they will need for a trip of 778 miles. Explain your reasoning.

2. The diagram below shows a rectangular plot of land cut into squares of 2.65 acres each.



   a. What is the acreage of the shaded region?

   b. What is the acreage of the unshaded region?

   c. In this area, land sells for $2,475 per acre.

      i. What would the price of the shaded region be?

      ii. What would the price of the unshaded region be?

   d. In this area, owners pay property taxes of $13.50 per thousand dollars of property value. What is the total annual property tax for the shaded and unshaded regions combined? Explain.

3. Use the number sentence $123 \times 4 = 492$ to help you solve the following:

   a. 12.3×4 b. 1.23×4 c. 0.123×4

   d. 0.123×40 e. 0.123×400 f. 0.123×4000

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Additional Practice *(continued)*

4. Use the number sentence $63 \times 501 = 31{,}563$ to help you solve the following:

a. 6.3×5.01 **b.** 6.3×0.501 **c.** 6.3×50.1

d. 0.63×5.01 **e.** 0.63×501 **f.** 0.63×0.501

5. For each of the following problems, estimate the product. Explain.

a. 2.4×0.8 **b.** 5.21×1.1

c. 1.29×8 **d.** $12.2 \times \frac{1}{2}$

e. 74.6×1.5 **f.** 3.04×100

6. For (a)–(f) in problem 5 above, find the product. Show your work.

7. Compute each product. What patterns do you notice?

a. 5.5×9.9 **b.** 5.5×9.99 **c.** 5.5×9.999 **d.** 5.5×9.9999

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Skill: Multiplying Decimals

Place the decimal point in each product.

1. $4.3 \times 2.9 = 1247$

2. $0.279 \times 53 = 14787$

3. $5.90 \times 6.3 = 3717$

Find each product.

4. 43.59×0.1

5. 246×0.01

6. 726×0.1

7.
$$\begin{array}{r} 5.342 \\ \times\ 13 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 0.19 \\ \times\ 0.05 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 6.4 \\ \times\ 0.09 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 240 \\ \times\ 0.02 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 43.79 \\ \times\ 42 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 0.72 \\ \times\ 0.43 \\ \hline \end{array}$$

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Skill: Multiplying Decimals *(continued)*

Use mental math to find each product.

13. 5.97×100

14. $4 \times 0.2 \times 5$

15. $3 \times (0.8 \times 1)$

16. 5.23×100

17. $0.38 \cdot 1{,}000$

18. $(5)(4.2) \times 10$

Write a number sentence you could use for each situation.

19. A pen costs \$0.59. How much would a dozen pens cost?

20. A mint costs \$0.02. How much would a roll of 10 mints cost?

21. A bottle of juice has a deposit of \$0.10 on the bottle. How much deposit money would there be on 8 bottles?

22. An orange costs \$0.09. How much would 2 dozen oranges cost?

Use $<$, $=$, or $>$ to complete each statement.

23. $2.8 \times 10 \square 26 \cdot 100$

24. $38.6 \cdot 10 \square 2 \cdot 38.6 \cdot 5$

25. $3.1 \times 10 \square (0.5 \cdot 0.2)3.1$

26. $8.3 \cdot 10 \cdot 1 \square 8.3 \times 100$