Multiplication Quiz 2

1. Solve these problems using any method you choose. Estimate to make sure your answers are reasonable.

A.
$$\begin{array}{r} 64 \\ \times\ 32 \\ \hline \end{array}$$

B. $42 \times 80 =$

C. $53 \times 28 =$

D.
$$\begin{array}{r} 64 \\ \times\ 32 \\ \hline \end{array}$$

E. $40 \times 500 =$

F. Show your estimation strategy for Question 1C.

G. Choose two of these problems and show how you can solve them using mental math.

2. Grace drew this rectangle to solve a multiplication problem. She wrote the partial products but not the numbers along the sides. Fill in the circle next to the problem Grace was solving.

$30 \times 40 = 1200$	$30 \times 2 = 60$
$8 \times 40 = 320$	$8 \times 2 = 16$

○ **A.** $34 \times 24 =$　　　　　　　　○ **B.** $38 \times 42 =$

○ **C.** $83 \times 42 =$　　　　　　　　○ **D.** $32 \times 48 =$

3. Estimate an answer for 386×29. Fill in the circle next to the most reasonable answer. Do not find the exact answer for the problem. Show how you estimated to the right.

○ **A.** 23,784

○ **B.** 1394

○ **C.** 13,644

○ **D.** 11,194

4. Draw a circle around the four partial products that you get when using the all-partials method to solve 62×58.

8×20　　　　　80×60　　　　　50×2　　　　　50×8

50×60　　　　50×20　　　　8×60　　　　　8×2

Name _____   Date _____

5. Michael solved this problem using the compact method.

$$
\begin{array}{r}
\overset{4}{3}6 \\
\times\ 17 \\
\hline
252 \\
360 \\
\hline
612
\end{array}
$$

A. What does the small 4 above the 3 mean?

B. What did Michael multiply to get the partial product of 252?

C. How did Michael get the 5 in the tens place in the first partial product?

D. How did Michael get the 0 in the ones place in the second partial product?

6. Solve this problem from a math book from 1975:
There are 45 families in an apartment building. Each family pays $45 per week in rent and $5 per week for electricity. How much money does the owner collect each week? Show or tell how you solve the problem.

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Feedback Box

	Expec-tations	Check In	Comments
Demonstrate understanding of the place value concepts and mathematical properties involved in operations with multidigit numbers (e.g., use the distributive property to multiply). [Q# 2, 4, 5]	E1		
Show connections between models and strategies for multiplication (e.g., demonstrate partial products using a rectangle model for multiplication). [Q# 2]	E2		
Estimate products of multidigit numbers. [Q# 1F, 3]	E3		
Multiply multidigit numbers using mental math strategies and paper-and-pencil methods (e.g., expanded form, all-partials). [Q# 1, 2, 4, 5, 6] • Using mental math [Q# 1G] • Using rectangles [Q# 2] • Using all-partials [Q# 4]	E4		
Multiply 2-digit by 2-digit numbers using the compact method. [Q# 5]	E5		
Choose appropriately from among estimation, mental math strategies, and paper-and-pencil methods to multiply whole numbers. [Q# 1, 6]	E6		