

# Patterns in Multiplying Fractions

1. Use fraction strips, circle pieces, or number lines to complete each table.

Multiply by  $\frac{1}{3}$

A.

Input	Output
6	
9	
12	
15	

Multiply by  $\frac{2}{3}$

B.

Input	Output
6	
9	
12	
15	

Multiply by  $\frac{1}{5}$

C.

Input	Output
5	
10	
15	
20	

Multiply by  $\frac{3}{5}$

D.

Input	Output
5	
10	
15	
20	

Multiply by  $\frac{1}{4}$

E.

Input	Output
2	
4	
6	
8	
12	
16	

Multiply by  $\frac{3}{4}$

F.

Input	Output
2	
4	
6	
8	
12	
16	

2. Which number sentences are true?

	True	False
A. $3 \times \frac{2}{3} = 3 \times \frac{1}{3} \times 2$		
B. $6 \times \frac{1}{3} = 2$		
C. $4 \times \frac{3}{8} = 2 \times 3$		
D. $4 \times \frac{3}{8} = \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8}$		
E. $4 \times \frac{3}{8} = \frac{12}{8}$		
F. $4 \times \frac{3}{8} = \frac{12}{32}$		
G. $4 \times \frac{3}{8} = \frac{1}{2} \times 3$		

H. Show or tell how you know the number sentence in Question G is true.