

a.

b.

Name:													
Complete	ete a geometric number pattern												
Complete the following geometric sequ	ience.												
5, 15, 45, 135, 405,,													
5, 20, 80, , 1,280													
													S
												(3)	2





a.

b.

Complete the following geometric sequence. 5, 15, 45, 135, 405, Find the common ratio of all the terms First term = 5. Common ratio $(r) = t \cdot /t_1$ $t \cdot /t_1$ $t \cdot /t_1$ $t \cdot /t_2$ $t \cdot /t_3$ $t \cdot /t_4$ $t \cdot /t$. was needs 1756 175			
Find the common ratio of all the terms First term = 5 Common ratio (r) = tx/t. tx/t		Com	plete a ge	ometri	c num	ıber pa	attern			
Find the common ratio of all the terms First term = 5 Common ratio (r) = tz/t. tz/t								1		
First term = 5 Common ratio (r) = t _x /t ₁ t _x /t ₂ t _x /t ₃ $\frac{15}{5} = \frac{5 \times 3}{1 \times 5}$ $\frac{45}{15} = \frac{3 \times 15}{1 \times 15}$ $\frac{135}{15} = \frac{3 \times 45}{1 \times 45}$ $\frac{135}{1 \times 5} = \frac{3 \times 15}{1 \times 15}$ $\frac{135}{45} = \frac{3 \times 45}{1 \times 45}$ $\frac{135}{1 \times 5} = \frac{3 \times 15}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 45}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3}{1 \times 135}$ $\frac{135}{1 \times 135} = \frac{3 \times 135}{1 \times 135}$ $\frac{135}{1 \times 135$			etric seque	nce.						
t./t. ts/t. ts/t. ts/t. ts/t. ts/t. ts/t. ts/t. $\frac{15}{5} = \frac{5 \times 3}{1 \times 5} = \frac{45}{1 \times 15} = \frac{3 \times 15}{1 \times 15} = \frac{3 \times 45}{1 \times 45} = \frac{3 \times 15}{1 \times 135} = \frac{3 \times 45}{1 \times 135} = \frac{3}{1 \times 135}$		n ratio of all the ter	ms							
$\frac{15}{5} = \frac{5 \times 3}{1 \times 5} \qquad \frac{45}{15} = \frac{3 \times 15}{1 \times 15} \qquad \frac{135}{45} = \frac{3 \times 45}{1 \times 45} \qquad \frac{405}{135} = \frac{3 \times 135}{1 \times 135}$ $= 3 \qquad \qquad = $	Common ratio (r	$t) = t_2/t_1$								
5 - 1x5	t ₂ /t ₁	t ₃ /t ₂	t ₄ /t ₃		t ₅ /t	.4				
Since the common ratio of all the terms is 3, it shows that each number is 3 times the previouse number So, multiply 405 by 3 to find the first missing number 405 x 3 = 1,215 The last missing number is 1,215 x 3 = 3,645 Therefore, the missing numbers are 1,215 and 3,645 5, 20, 80,	15 = 5x3 5 1x5	$\frac{45}{15} = \frac{3 \times 15}{1 \times 15}$	$\frac{135}{45} = \frac{3x}{1x}$	45 45						
3 times the previouse number So, multiply 405 by 3 to find the first missing number 405 x 3 = 1,215 The last missing number is 1,215 x 3 = 3,645 Therefore, the missing numbers are 1,215 and 3,645 5, 20, 80,	= 3	= 3	= 3		= 3					
So, multiply 405 by 3 to find the first missing number $405 \times 3 = 1,215$ The last missing number is 1,215 x 3 = 3,645 Therefore, the missing numbers are 1,215 and 3,645 5, 20, 80,	Since the comr	mon ratio of all th	e terms is 3,	it shows	s that e	each nui	mber is			
The last missing number is 1,215 x 3 = 3,645 Therefore, the missing numbers are 1,215 and 3,645 5, 20, 80,	3 times the pre	eviouse number								
The last missing number is 1,215 x 3 = 3,645 Therefore, the missing numbers are 1,215 and 3,645 5, 20, 80,	So, multiply 40	05 by 3 to find the	e first missin	g numbe	er					
Therefore, the missing numbers are 1,215 and 3,645 5, 20, 80,, 1,280 Find the common ratio of all the terms First term = 5 Common ratio (r) = t_2/t_1 t_3/t_2 t_4/t_3 20 = $\frac{4 \times 5}{5}$ $\frac{80}{1 \times 5}$ $\frac{?}{1 \times 5}$ $\frac{?}{1 \times 5}$ Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number										
Find the common ratio of all the terms First term = 5 Common ratio (r) = t_2/t_1 t_2/t_1 t_3/t_2 t_4/t_3 20 = $4x5$ 5 $1x5$ 20 80 = 4 = 2 Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number	The last missin	g number is 1,215	x 3 = 3,645							
Find the common ratio of all the terms First term = 5 Common ratio (r) = t_2/t_1 t_2/t_1 t_3/t_2 t_4/t_3 20 = $\frac{4 \times 5}{1 \times 5}$ $\frac{80}{20}$ $\frac{?}{5}$ Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number	Ther	refore, the missing i	numbers are 1,	,215 and 3	3,645					
First term = 5 Common ratio (r) = t_2/t_1 t_2/t_1 t_3/t_2 t_4/t_3 20 = $\frac{4 \times 5}{1 \times 5}$ 80 ? Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number	5, 20, 80,	, 1,280								
First term = 5 Common ratio (r) = t_2/t_1 t_2/t_1 t_3/t_2 t_4/t_3 20 = $\frac{4 \times 5}{1 \times 5}$ 80 ? Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number	Find the comm	on ratio of all the	terms							
$t_2/t_1 \qquad t_3/t_2 \qquad t_4/t_3$ $\frac{20}{5} = \frac{4 \times 5}{1 \times 5} \qquad \frac{80}{20} \qquad \frac{?}{80}$ $= 4 \qquad = 4 \qquad = ?$ Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number										
$\frac{20}{5} = \frac{4 \times 5}{1 \times 5}$ $= 4$ $= 4$ $= 2$ Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number	Common ratio	$(r) = t_2/t_1$								
= 4 = ? Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number	t ₂ /t ₁	t ₃ /t ₂	t ₄ /t ₃							
= 4 = 2 = ? Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number	$\frac{20}{5} = \frac{4x5}{145}$	80								
Since the common ratio of all the terms is 4, it shows that each number is 4 times the previouse number	J IX5	20								
4 times the previouse number										
			e terms is 4,	it show	s that e	each hu	mber is			
	80 x 4 = 320									

Therefore, the missing term is 320