

# 1.1 Arithmetic Sequence

2, 4, 6, 8, 10, 12, 14, ...

√  
2   2   2

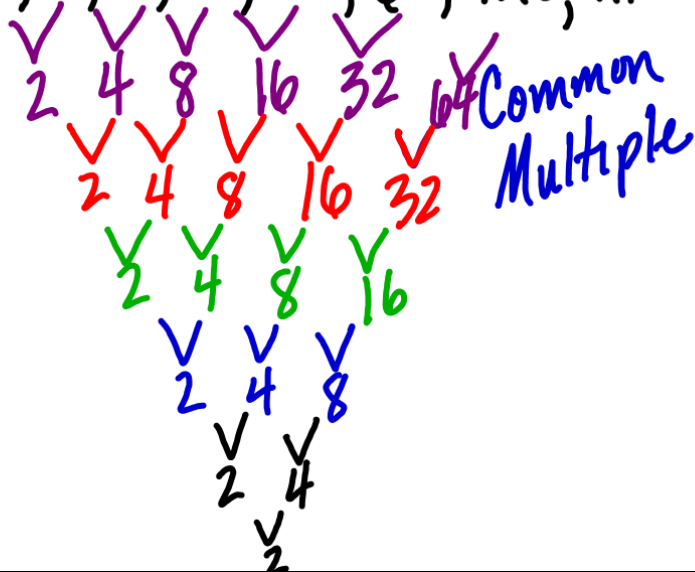
Common  
Difference

3, 6, 9, 12, 15, 18, 21, 24, ...

√   √   √  
3   3   3

# Geometric Sequence

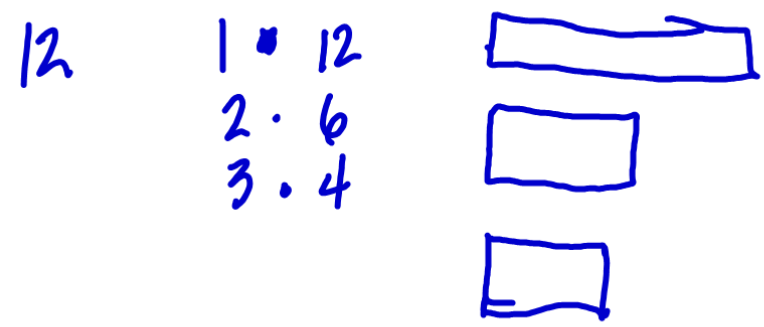
2, 4, 8, 16, 32, 64, 128, ...



$1, 4, 9, 16, 25, 36, 49, 64, 81, 100$   
 First Difference  $\checkmark$   $3, 5, 7, 9, 11, 13, 15, 17, 19$   
 Second Difference  $\checkmark$   $2, 2, 2, 2, 2, 2, 2, 2$



Square  
 $5^2$     $6^2$



1, 8, 27, 64, 125, 216

√  
7 19 37 61 91

√  
12 18 24 30

√  
6 6 6

16  
4  
—  
64

1     •     1     1, 3, 6

4     ••     3

9     •••     6

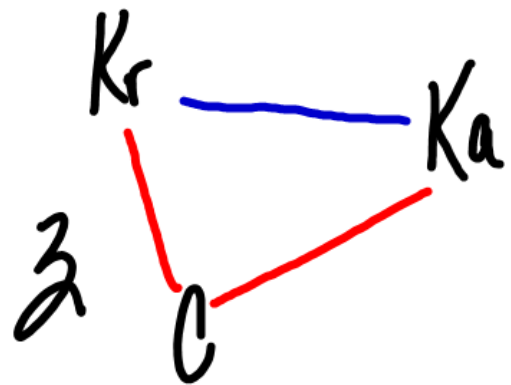
16     ••••     10

15

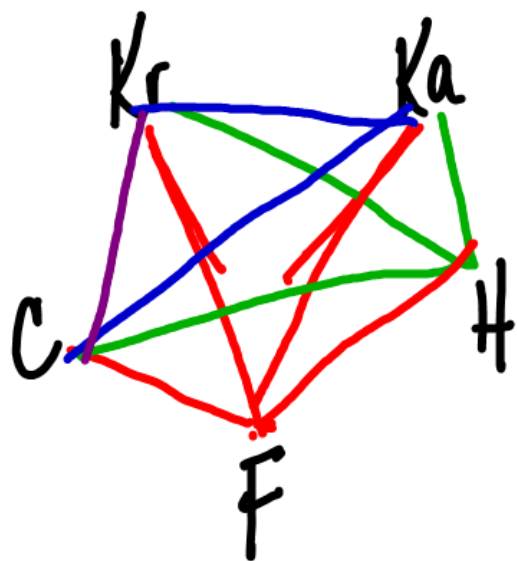
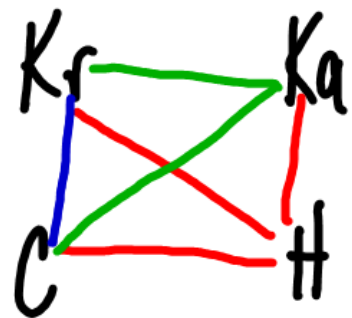
21

1, 3, 6, 10, 15, 21, 28

Triangular  
Number



6



10

Variables

$x$

Constant

Number

 Coefficient  
 $4x$

Expression

$$x = 5$$

$$4(5)$$

$$4 \times 5$$

$$4 \cdot 5$$

$$20$$

p 8      10-18 Even

p 16      10-20 Even

⑩  $4x$

$$x=1 \quad \frac{4(1)}{4}$$

$$x=2 \quad \frac{4(2)}{8}$$

$$x=3 \quad \frac{4(3)}{12}$$

