

1.1 Arithmetic Sequence

$$2, 4, 6, 8, 10, 12, 14, \dots$$

$$\begin{matrix} \checkmark & \checkmark \\ 2 & 2 \end{matrix}$$

Common
Difference

$$3, 6, 9, 12, 15, 18, 21, 24, \dots$$

$$\begin{matrix} \checkmark & \checkmark \\ 3 & 3 \end{matrix}$$

$$\begin{matrix} \checkmark \\ 3 \end{matrix}$$

Geometric Sequence

$$2, 4, 8, 16, 32, 64, 128, \dots$$

$$\begin{matrix} \checkmark & \checkmark & \checkmark & \checkmark \\ 2 & 4 & 8 & 16 \end{matrix}$$

$$\begin{matrix} \checkmark & \checkmark & \checkmark & \checkmark \\ 2 & 4 & 8 & 16 \end{matrix}$$

$$\begin{matrix} \checkmark & \checkmark & \checkmark \\ 2 & 4 & 8 \end{matrix}$$

$$\begin{matrix} \checkmark & \checkmark \\ 2 & 4 \end{matrix}$$

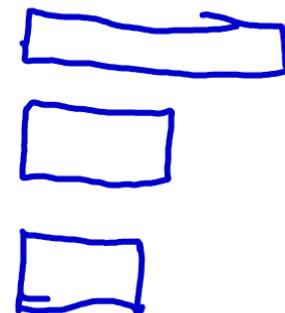
$$\begin{matrix} \checkmark \\ 2 \end{matrix}$$

Common
Multiple

$$\begin{array}{ccccccccc}
 1, & 4, & 9, & 16, & 25, & 36, & 49, & 64, & 81, & 100 \\
 \checkmark & \checkmark \\
 \text{First} & 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 & 19 \\
 \text{Difference} & \checkmark & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 \\
 \text{Second} & & & & & & & & & \\
 \text{Difference} & & & & & & & & & \\
 \vdots & \vdots & & & & & 5^2 & 6^2 & \\
 & & & & & & \text{Square} & &
 \end{array}$$

6 :::

$$\begin{array}{l}
 12 \\
 1 \cdot 12 \\
 2 \cdot 6 \\
 3 \cdot 4
 \end{array}$$



1, 8, 27, 64, 125, 216

✓ ✓ ✓ ✓ ✓
7 19 31 61 91

✓ ✓ ✓ ✓
12 18 24 30

✓ ✓ ✓
6 6 6

$$\begin{array}{r} 16 \\ 4 \hline 64 \end{array}$$

1 . 1
1, 3, 6

4 :: 3

9 :::: 6

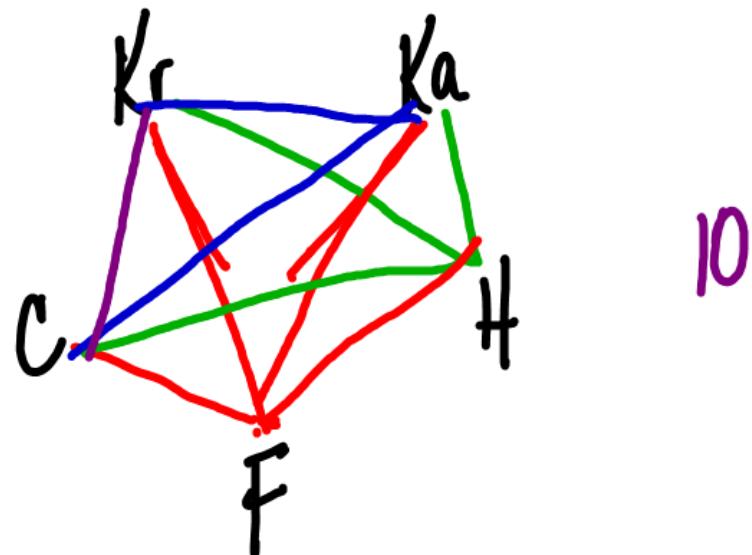
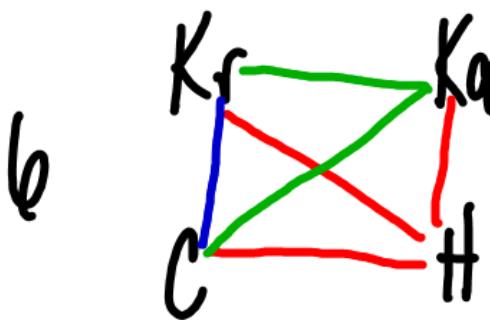
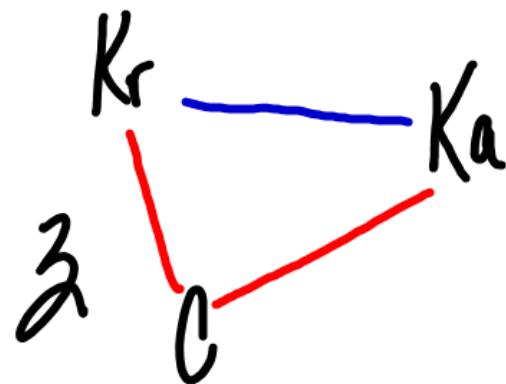
16 ::::: 10

15

21

1, 3, 6, 10, 15, 21, 28
✓ 2 ✓ 3 ✓ 4 ✓ 5 ✓ 6 ✓ 7
✓ 1 ✓ 1 ✓ 1 ✓ 1 ✓ 1

Triangular
Number



Variables

X

Constant
Number

Coefficient

4X

Expression

$$x = 5$$

$$4(5)$$

$$20$$

$$4 \times 5$$

$$4 \cdot 5$$

p 8 10-18 Even

p 16 10-20 Even

$$\textcircled{10} \quad 4x$$

$$x=1 \quad 4(1) \\ 4$$

$$x=2 \quad 4(2) \\ 8$$

$$x=3 \quad 4(3) \\ 12$$

