

NAME

QUARTER 1

GRADE & SECTION

DATE

Activity: Finding Common Difference

Show the solution to find the common difference and complete the given arithmetic sequence.

Recall that: $d = \frac{a_n - a_k}{n - k}$

- 1) The 4th term of an arithmetic sequence is 52 and the 15th term is 162.

Take $a_n = 162$, $n =$
and $a_k =$, $k =$

Solution:

$$d = \frac{162 - \boxed{}}{\boxed{} - \boxed{}}$$

$$d = \frac{\boxed{}}{\boxed{}}$$

$$d = \boxed{}$$

Therefore, to complete the sequence:

			52			...	162	...	
a_1	a_2	a_3	a_4	a_5	a_6		a_{15}		a_{40}

- 2) The 3rd term of an arithmetic sequence is -2 and the 18th term is -77.

Take $a_n = -77$, $n =$
and $a_k =$, $k =$

Solution:

$$d = \frac{-77 - \boxed{}}{\boxed{} - \boxed{}}$$

$$d = \frac{\boxed{}}{\boxed{}}$$

$$d = \boxed{}$$

Therefore, to complete the sequence:

		-2				...	-77	...	
a_1	a_2	a_3	a_4	a_5	a_6		a_{18}		a_{50}

Prepared by: QUEENIE PEARL E. DOMASIG

LIVEWORKSHEETS