## LESSON \& Answer Key - INTERPRETING GRAPHS with a SCALE

Lessons here transition
to UMath XI
The "U" in UMathX and UMathXI ... is ... "UNDERSTANDING"

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NOTE:
LINKS TO UMATHXI WILL FUNCTION AFTER WE HAVE TRANSITIONED TO UMATHXI

Framework for Learning:
Leader's Name:
Co-Leader's Name: $\qquad$

## Graphs with a Scale

Instructor's Initials: .......

## Getting Started: (here we assume UMathXI access)

In UMATH X follow the Content Menu path:
Graphing > Reading \& Sketching Graphs > Graphs with a Scale
If you do NOT have access, then work through Concept...Distance and Time, on notes below.
Concept...Distance and Time
This graph shows the relationship between the
$\qquad$ Juan was from home and $\qquad$ .
Between 0 and 4 minutes, Juan travels from
$\qquad$ m to $\qquad$ m from home.


Between 4 and 6 minutes, Juan travels $\qquad$ $\mathbf{m}$ which means he did not $\qquad$ while he $\qquad$ for a total of $\qquad$ minutes.

Between 6 and 8 minutes, Juan travels $\qquad$ m to $\qquad$ $\mathbf{m}$ from home. In this segment of the graph, the distance is increasing more rapidly than the first segment of the graph which means Juan is going
$\qquad$ than when he started.
Working In It: Answer the questions using the information in the graph.
Ivan's Ride to the Party


It took 30 minutes to reach the store. Which segment shows this?
What time did Ivan reach the store? $\qquad$
$\qquad$

## Graphing > Reading \& Sketching Graphs > Graphs with a Scale > Example 6 ...Ivan's Ride to the Party

Compare your answers on the previous page with those in the lesson. Correct any mistakes.

## Reflect \& Connect:

Match the graphs with the corresponding scenarios listed below.
Write the corresponding letter in the answer blanks next to each scenario.

$\qquad$ 1.) Garret forgot his scorebook on his way to the ball diamond. He returned home to pick it up and then ran to the diamond.
$\qquad$ 2.) Garret went to the ball diamond. Halfway there he stopped to talk to a friend for 3 minutes before continuing to the diamond.
$\qquad$ 3.) Garret went to the ball diamond. He stayed for only 4 minutes before returning home. The diamond is 600 meters from his house.
$\qquad$ 4.) Garret went to the ball diamond. After 4 minutes he had travelled only 200 meters and decided to run the rest of the way.

Compare your answers above with a partner. Discuss and correct any mistakes.


Write a story on a separate sheet of paper describing what could be happening during each segment in the line graph shown.
Share your story with a partner.
Discuss and correct any
mistakes before turning in your work to
 your teacher.

## Build It. Draw It. Talk It. Write It. Now you OWN It!

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## Answer Key

## Getting Started

## Concept...Distance and Time

This graph shows the relationship between the
$\qquad$ Juan was from home and $\qquad$ time

Between 0 and 4 minutes, Juan travels from
$\qquad$ D m to $\qquad$ m from home.


Between 4 and 6 minutes, Juan travels $\qquad$ 0 m which means he
did not $\qquad$ move while he $\qquad$ stopped for a total of $\qquad$ 2 minutes.

Between 6 and 8 minutes, Juan travels 100 m to $\underline{200} \mathbf{m}$ from home. In this segment of the graph, the distance is increasing more rapidly than the first segment of the graph which means Juan is going faster than when he started.

Ivan's Ride to the Party


Time

This graph represents Ivan's ride from his house to a party. On the way to the party, Ivan stops briefly at a friend's house. Later, he stops at a store to shop.
How long did it take Ivan to get to the party? $\qquad$ hours

Which segment of the graph represents Ivan stopping at his friend's house? B
$\qquad$

It took 30 minutes to reach the store. Which segment shows this? C
What time did Ivan reach the store? 9:30 AM
What was the distance Ivan traveled to the party? $\quad 2.0 \mathrm{~km}$


## Build It. Draw It. Talk It. Write It. Now you OWN It!

