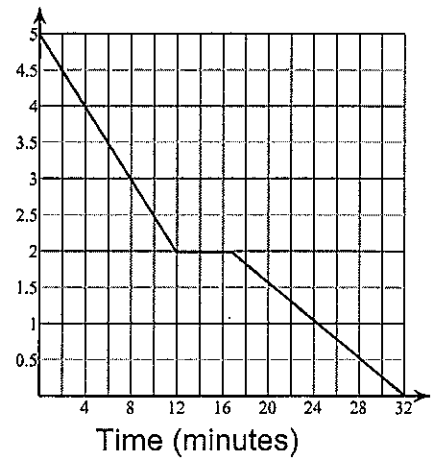
Algebra 1 ECA Remediation Name Answer Key

# Homework 8.3



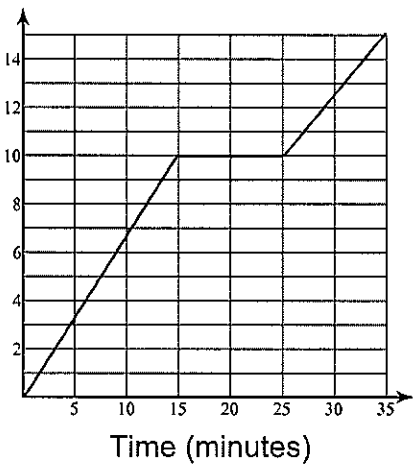
1) Sally rode her bike home from school. The graph below shows Sally's distance from home over time.

Sally's Bike Ride Home




2) Patricia drove her car to work. The graph below shows Patricia's distance from home over time.

Patricia's Drive to School




3) On what time interval is Sally traveling at 15 mph?

$\text{speed} = \frac{3\text{miles}}{12\text{min}} = \frac{3\text{miles}}{1/5\text{ hr}} = (3\text{miles})(5) = 15\text{miles/hr}$

(first 12 minutes)

4) On what time interval is Patricia traveling at 40 mph?

$\text{speed} = \frac{10\text{miles}}{15\text{min}} = \frac{10\text{miles}}{1/4\text{ hr}} = (10\text{miles})4 = 40\text{mph}$

(first 15 minutes)

5) On what time interval is Sally stopped?

(12min to 17 minutes)

6) On what time interval is Patricia stopped?

(15min to 25 min)

7) On what time interval is Sally traveling the fastest?

(first 12 minutes)

Steepest line

8) On what time interval is Patricia traveling the fastest?

(first 15 minutes)

**Find the slope of the line through each pair of points.**

9) (–10, 9), (16, –7)

$m = \frac{9 + +7}{-10 - 16}$

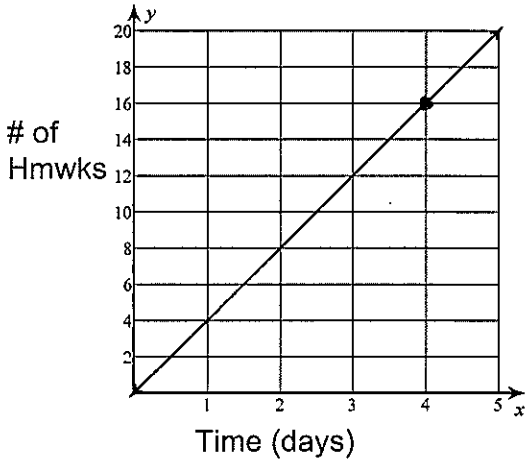
$= \frac{16}{-26} = \frac{8}{-13}$

10) (9, 17), (18, –9)

$m = \frac{17 + 9}{9 - 18} = \frac{26}{-9}$

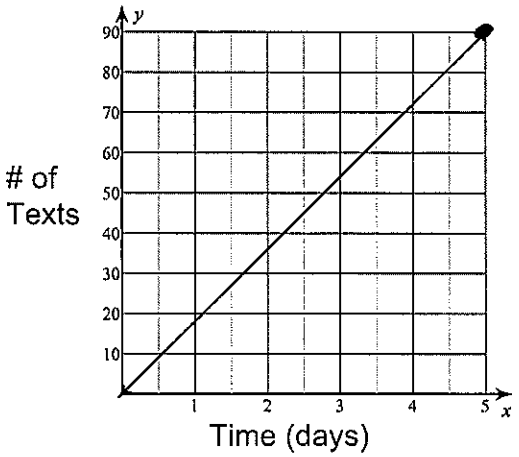
11) The graph below represents the total number of times a student is given a homework assignment over a 5 - day period.

Homework Assigned




12) The graph below represents the total number of times a text message is received by a teenage boy over a 5 - day period.

Text messages Received




13) What is the slope of this line segment. Include the appropriate units in your answer.

$Slope = \frac{16\ hmwks}{4\ days} = \frac{4\ hmwks}{1\ day}$

14) What is the slope of this line segment. Include the appropriate units in your answer.

$Slope = \frac{90\ texts}{5\ days} = \frac{18\ texts}{1\ day}$

15) Write an equation that represents the total number of Homework Assignments, H, are given after, d, days.

$H = 4d$

16) Write an equation that represents the total number of text messages, T, are received after, d, days.

$T = 18d$

17) If this trend continues, how many homework assignments will this student be given 15 days?

$H = 4(15)$

$H = 60$ homeworks

18) If this trend continues, how many text messages will be received in 10 days?

$T = 18(10)$

$T = 180$ Texts

# Answers to Homework 8.3

3) The first 12 minutes 4) The first 15 minutes

5) 12 minutes to 17 minutes 6) 15 minutes to 25 minutes 7) During the first 12 minutes

8) During the first 15 minutes

9) $-\frac{8}{13}$ 10) $-\frac{26}{9}$

13) $\frac{4}{1}$ Homework Assignments per Day

14) $\frac{18}{1}$ Text Messges per Day 15) $H = 4d$ 16) $T = 18d$

17) 60 homeowrk assignments 18) 180 Text Messages