

**Learning Outcomes Covered:**

**4F:** I can understand how to interpolate and extrapolate data from linear relations.

**CONTENT Assessment Questions:**

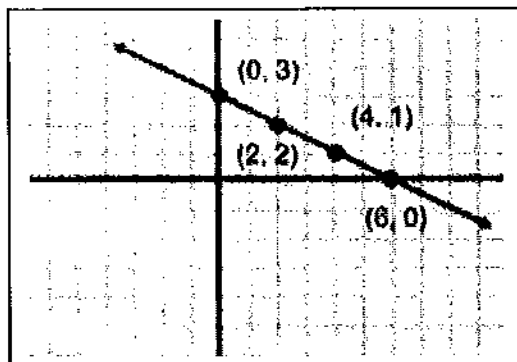
1. This graph represents a linear relation.

a) Determine the value of  $y$  for each value of  $x$ .

i)  $x = 2$   $y = 2$

ii)  $x = 8$   $y = -1$

iii)  $x = -6$   $y = 6$



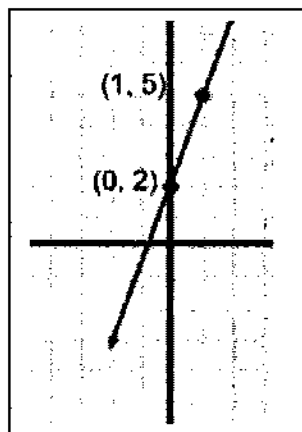
For which part(s) did you use interpolation? i & ii Extrapolation? iii

b) Determine the value of  $x$  for each value of  $y$ .

i)  $y = -1$   $x = -1.2$

ii)  $y = -7$

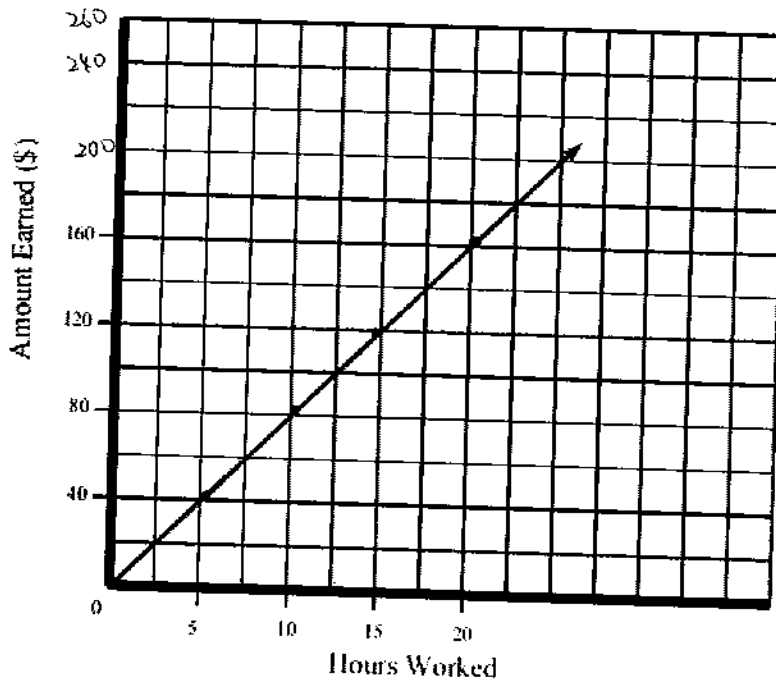
iii)  $y = 3$   $x = 1.2$



For which part(s) did you use interpolation? i & iii Extrapolation? ii

2. Use the graph to answer each of the following questions. State whether you used interpolation or extrapolation to find the answer.

Mark's Earnings



- a. How many hours did Mark have to work to earn \$120?

15 hours, interpolation.

- b. How many hours did Mark have to work to earn \$260?

32.5 hours, extrapolation.

- c. How much would Mark have earned if he worked 12 hours?

\$96, interpolation.

**ONGOING LEARNING ACTIVITIES:**

CORE: Page 196: Curricular Competencies: 11, 13  
Content: 4, 5, 6, 7, 8, 9, 12

ADVANCED: Page 198: 15