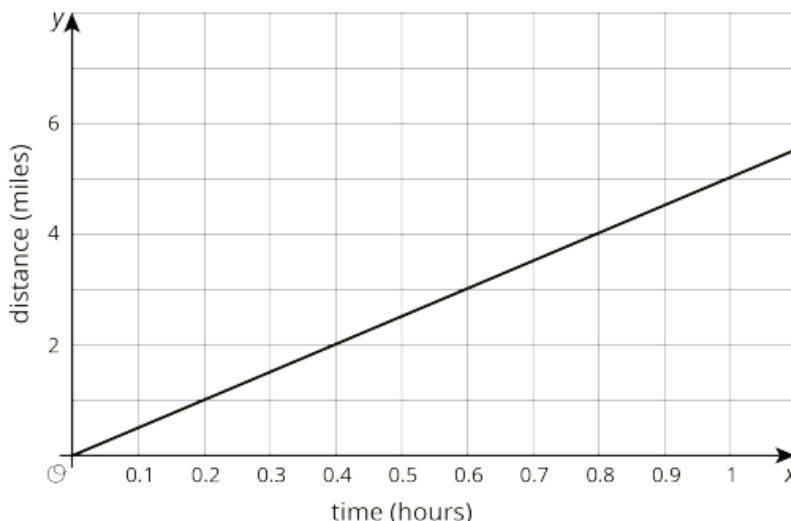Name _____ Hour _____

Unit 3: End-of-Unit Assessment

Scott and Katie jog at constant speeds. The relationship between their distance and time is shown on the graph.

Who is the faster runner? Explain how you know.

For two weeks, the highest temperature each day was recorded in four different cities.   Lines l, m, n, and p are graphs of the temperature over time in Lubbock, Memphis, New Orleans, and Phoenix. Which statement is true?
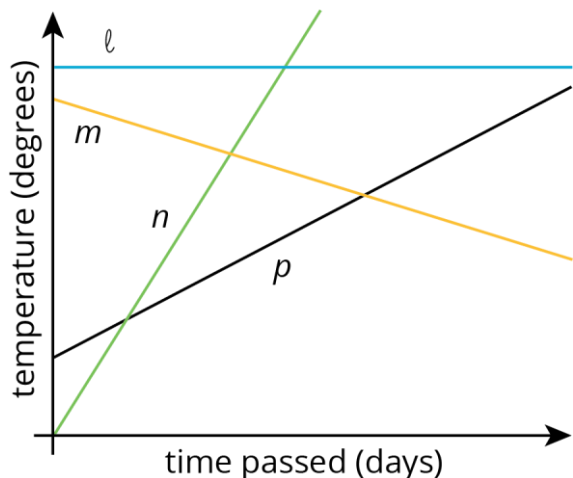
A. The high temperature in Lubbock increased as time passed.

B. The high temperature in Memphis decreased steadily.

C. Initially, the high temperature was warmer in Phoenix than in Memphis.

D. The high temperature in Phoenix rose faster than the temperature in New Orleans.

Claire and Maddie have summer jobs babysitting. Claire's earnings are represented by the equation y = 14.5x, where y is her earnings in dollars for working x hours. The table shows some information about Maddie's pay.

Who is paid at a higher rate per hour?

How much would each girl earn if they worked 20 hours?

time worked (hours)	earnings (dollars)
7	92.75
4.5	59.63
37	490.25

Taylor borrowed some money from her brother. She pays him back by giving him the same amount every week. The graph below shows
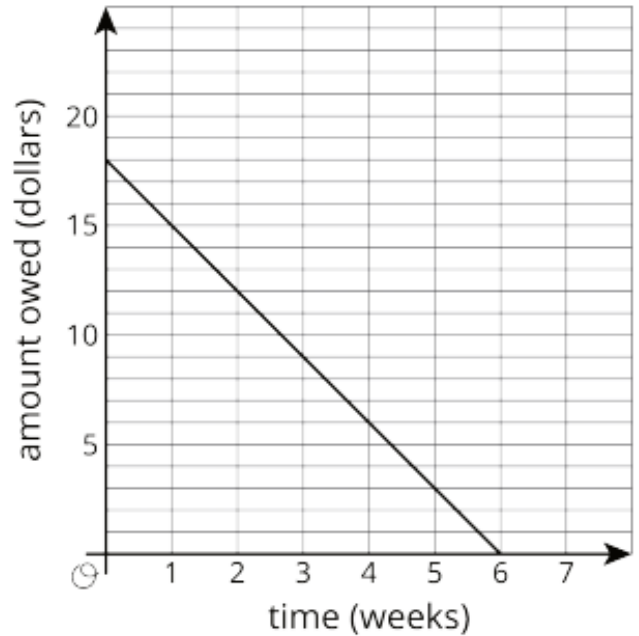
how much she owes after each week.
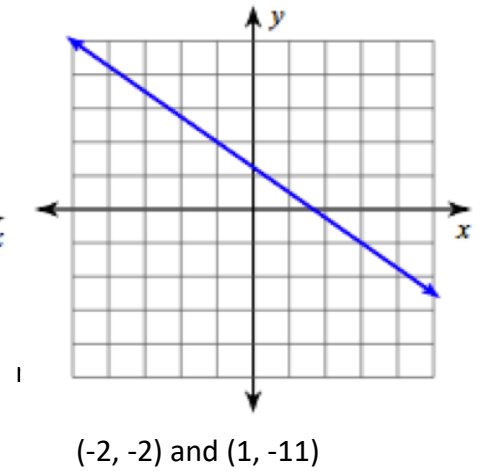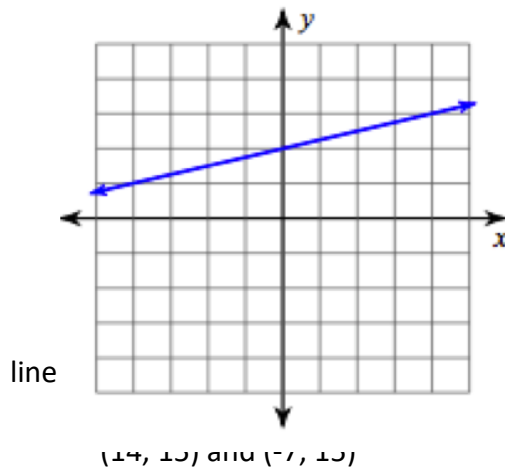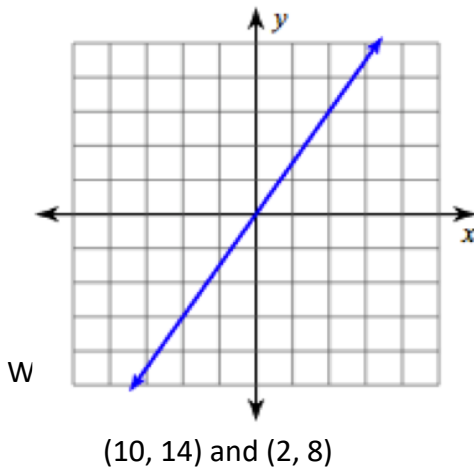
What is the slope of this graph?

What does the slope mean in this situation?

What is the vertical intercept?

What does the vertical intercept mean in this situation?

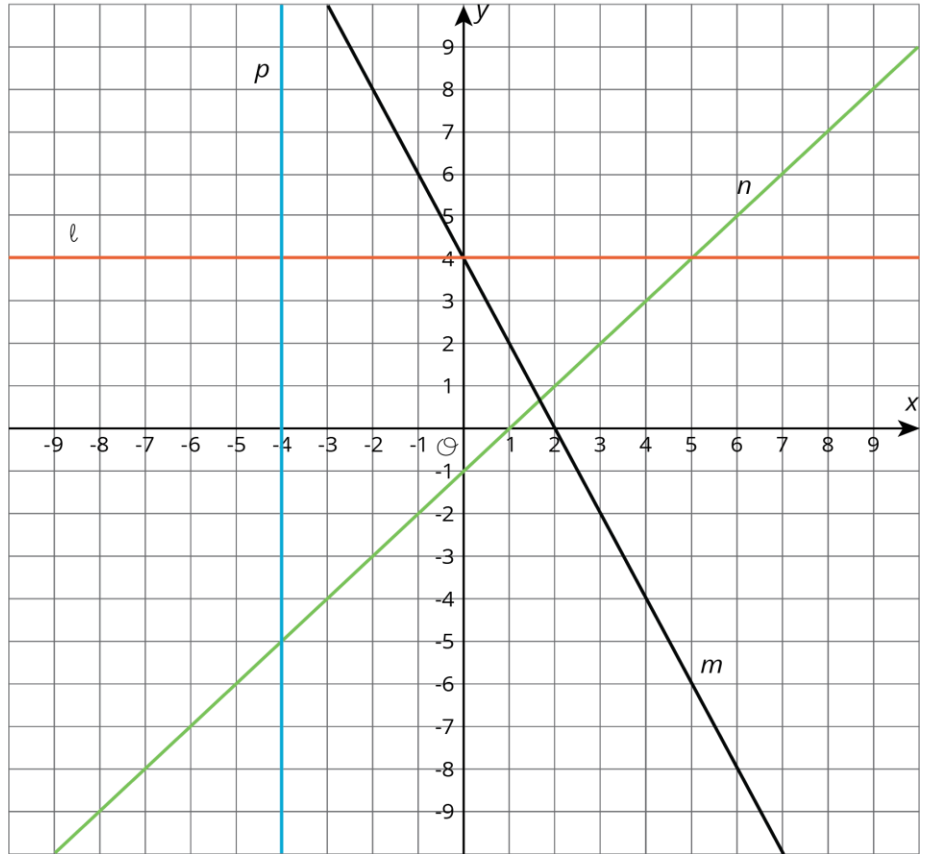Find the slope of each line using slope triangles. Show work for credit.

W

(10, 14) and (2, 8)

line

(14, 15) and (-7, 15)

l

(-2, -2) and (1, -11)
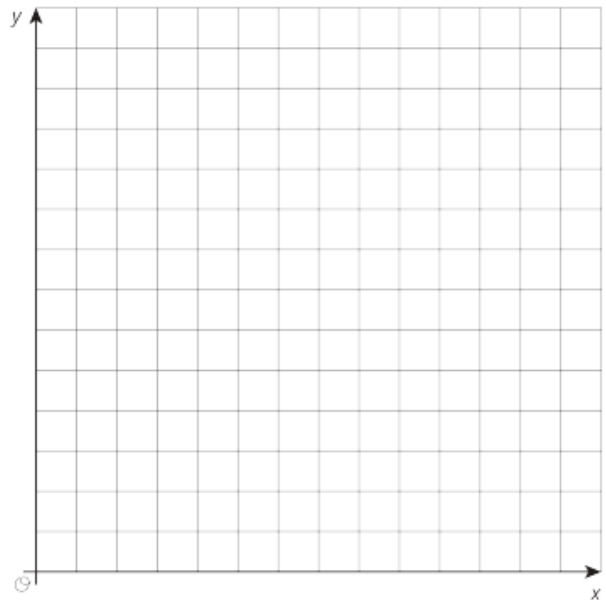
Write an equation for each line.

Line l

Line m

Line n

Line p

Make a graph of a linear relationship with a slope of 1/2 that is not a proportional relationship.

Show how you know that the slope is 1/2.

Write an equation for the line you graphed.

Select all of the points that would be on the graph of the line 2x + 4y = 20.

(0, 5)   (0, 10)   (1, 2)   (1, 4)   (5, 0)   (10, 0)