Name: _____

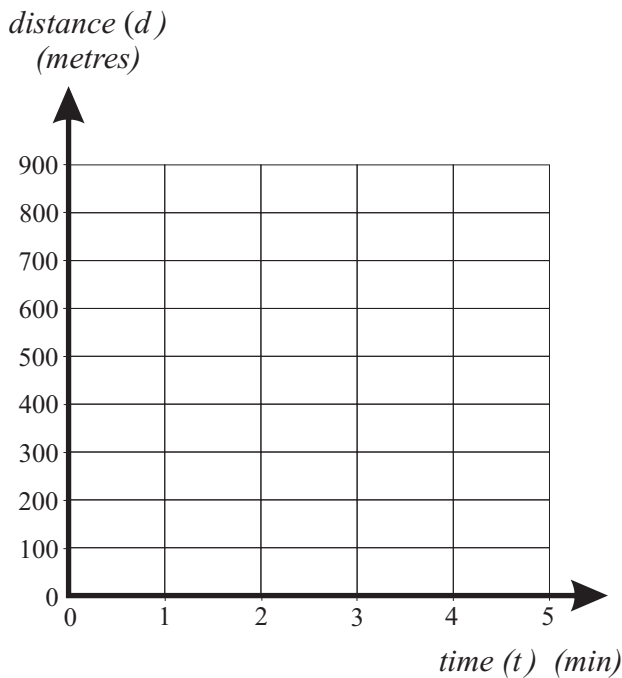**1.** The distances (in metres) and times (in minutes) for Tricia, jogging, and Faye, walking, are shown below.

Time (min)	0	1	2	3	4	5
Tricia	0	180	360	540	720	900
Faye	0	100	200	300	400	500

(a) Plot the points for both Tricia and Faye on the axes below.
Connect the points with smooth lines.

distance (d)
(metres)

(b) Find a rule connecting d and t for Faye and Tricia.

Tricia $d =$

Faye $d =$

(c) How far would each person travel in ten minutes?

Tricia _____ m

Faye _____ m

2. Two sales people have each negotiated different contracts with their employer.
Michael negotiated $20 per hour.
Karen negotiated $15 per hour plus $20 per day.
(a) Complete this table showing how much each person has earned after the number of hours worked.

Time (hrs)	1	2	3	4	5	6
Michael						
Karen						

(b) Show this information on a graph.
Draw two lines, one for Michael and one for Karen.
Label each axis and include their scales.
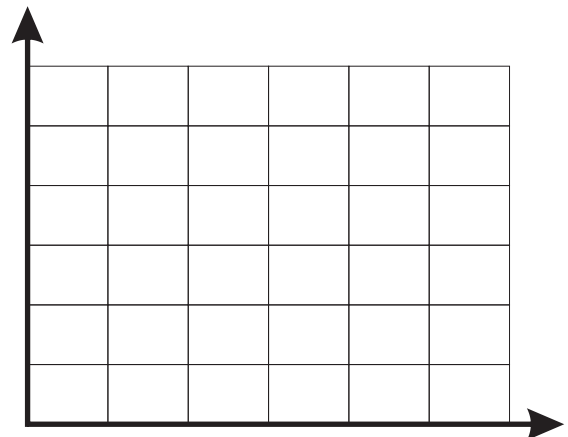
(c) Find a rule connecting amount earned (A) and number of hours worked (n) for each person.

Michael $A =$

Karen $A =$

(d) After how long at work have they both earned the same amount?
_____ hours

(e) Who do you think was the better negotiator? Why?

_____

_____

_____