

Foundations and Pre-Calculus 10
5.1-5.5 Assignment

Name: _____
Block: _____

1. Is each of the following relations a function? Explain your answer.

a) $\{(1,2),(2,3),(3,4),(4,4)\}$

Function?

b) $\{(1,1),(2,3),(2,4),(3,5)\}$

Function?

Explanation:

Explanation:

c)

Person	Height (cm)
A	170
B	165
C	180
D	170

Function?

Explanation:

d)

Number	Prime Factor
4	2
6	2
6	3
8	2

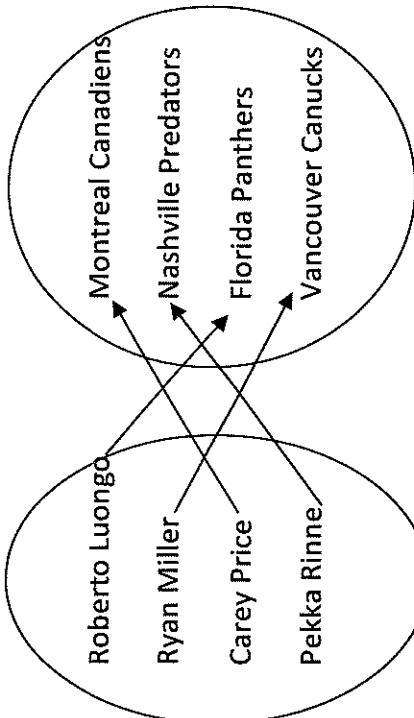
Function?

Explanation:

2. Write the domain and range of each relation above.

- a) Domain: _____ Range: _____
b) Domain: _____ Range: _____
c) Domain: _____ Range: _____
d) Domain: _____ Range: _____

3. The following arrow diagram represents the relation of hockey goalies to the team they play for.



- a) Write the relation as a set of ordered pairs.
b) Write the relation as a table.

4. The equation $C = 30n + 100$ represents the cost, C dollars, for a membership at a local gym, where n is the number of months.

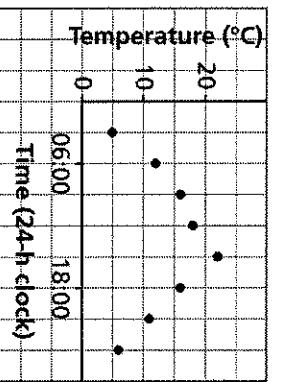
- a) Describe the function.
Write the equation in function notation.

b) Determine the value of $C(12)$.
What does this number represent?

- c) Determine the value of n when $C(n) = 340$. What does this number represent?

5. The graph below shows the outside temperature over a 24-hour period.

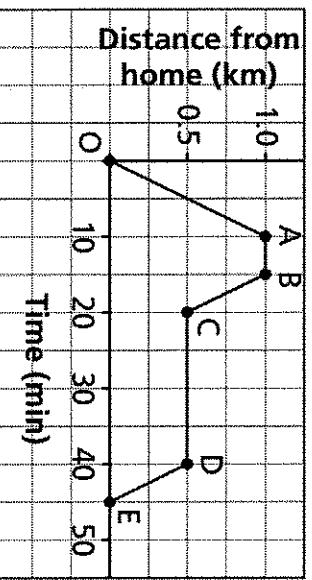
Outside Temperature over a 24-h Period
a) What was the highest temperature of the day?
When did it occur?



- b) What was the temperature at 9 pm (21:00) ?
c) At what 2 times during the day was the temperature the same?

6. The graph below shows Bob's distance from home during a trip to a local store. Describe each segment of the graph.

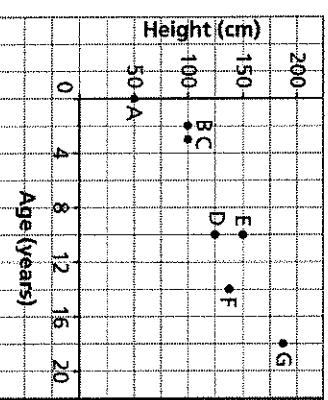
My Round Trip to the Store



7. For each graph below

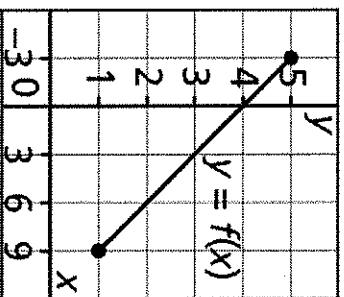
- a) State whether each graph represents a function. Explain your reasoning.
b) State the domain and range of the function.

Ages and Heights of People



Function?

Explanation:



Function?

Explanation:

Domain:

Range: