

1. You are ordering pumpkins for all the families living in your block from an online store. Each pumpkin costs \$3. Shipping on the order will be \$15 for up to 14 pumpkins ordered. You intend to purchase 14 pumpkins.

a) **Write** a function for the cost, $P(d)$, where d represents the number of pumpkins ordered.

b) **Identify** the domain of the function $P(d)$.

c) **Interpret** what the intercept(s) represent.

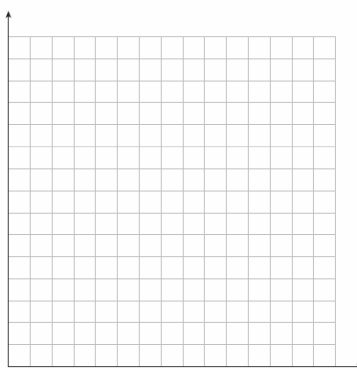
d) **Fill** in the table with the values d and $P(d)$.

d	$P(d)$

e) **Fill** in the table with the ordered pairs.

$(d, P(d))$
(\quad , \quad)

f) **Graph** the function by plotting the ordered pairs. **Label** the graph completely.



2. Jim has a car that he wants to get rid of. The car is worth \$4000 and depreciates \$200 for every month that he keeps it.

a) **Write** a function for the cost, $C(d)$, where d represents the number of months he keeps the car.

b) **Identify** the domain of the function $C(d)$.

c) **Interpret** what the intercept(s) represent.

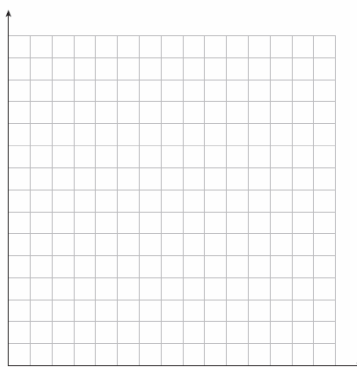
d) **Fill** in the table with the values d and $C(d)$.

d	$C(d)$

e) **Fill** in the table with the ordered pairs.

$(d, C(d))$
(\quad , \quad)

f) **Graph** the function by plotting the ordered pairs. **Label** the graph completely.



3. A function relates the input x , the total number of laptops purchased, to the output $f(x)$, the amount spent in dollars. **Explain** the meaning of $f(7) = 1500$.