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## Math 9 HW Section 4.2 Linear Relations:

1. Given the grid below, indicate the coordinates for each of the following points:

A: $\qquad$

B: $\qquad$ C: $\qquad$
D: $\qquad$

E: $\qquad$
F: $\qquad$
G: $\qquad$

H: $\qquad$ I: $\qquad$
2. Draw each of the following points on the grid provided:

$A:(-3,4)$
B: $(4,-3)$
C: $(2,5)$
D: $(-2,-5)$
E: $(6,1)$
$\mathrm{F}:(7,-5)$
$\mathrm{G}:(-4,9)$
H: $(9,-4)$
I: $(0,0)$
3. Given the following equation, $y=2 x+3$, what is the value of " $y$ " when " $x$ " is equal to 12 ?
4. Given the following equation, $y=\frac{2}{3} x-10$, what is the value of " $y$ " when " $x$ " is equal to 15 ?
5. Given each equation below, complete the table of values given and then plot the points on the grid:

6. Given the following equation, make a table of values and draw the graph with the grid provided:
$y=\frac{3}{2} x-5$

| $x$ | $y$ |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


7. Timothy took the taxi and the cost was $\$ 2.50$ plus $\$ 0.75$ for each km . Write an equation for the cost " C " vs distance in km " D ".
b) How much would the taxi ride cost if he travelled for 10 km ?
c) If Timothy had only $\$ 20.00$ in his wallet, what was the farthest distance he can travel? Assume that tax and tips are already included.
d) Complete the following table of values:

| $C$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $d(\mathrm{~km})$ | 5 | 10 | 15 | 20 |

e) Draw a graph representing the Cost as a function of the distance travelled. Label the axis and the increments. Label the coordinates of any points on your graph:


