## Linear Functions

1. Graph using the indicated method:
a) Table of Values: $4 x+3 y=12$

b) Using slope and y-intercept: $3 x+5 y=40$

2. Determine the information requested
a) Given the points $(-7,-4)$ and $(9,2)$ find
i) slope
ii) midpoint
iii) distance between points
b) from the equation $7 x-3 y=21$ determine
i) $y$-intercept
ii) $x$-intercept
iii) slope of a
iv) slope of a
3. Determine the equation of the line given:
a) $m=-2 / 3$ and $b=5$
b) $m=3 / 4$ and contains point $(-5,3)$
c) passes through the points $(4,7)$
d) passes through the point $(-2,5)$ and is perpendicular to y -axis
e) passes through the point $(-2,1)$ and is parallel to a line passing through points $(-5,3)$ and $(7,9)$
f) passes through the point $(-4,-2)$ and is perpendicular to a line having an equation of $4 x-5 y=6$
g) the equation of the perpendicular bisector of a line segment defined by the points $(9,-2)$ and $(-7,6)$.
