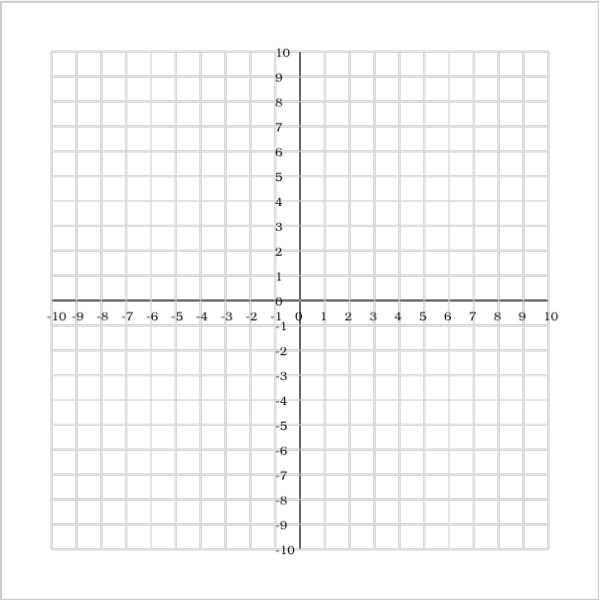
PLOTTING LINEAR GRAPHS

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1.

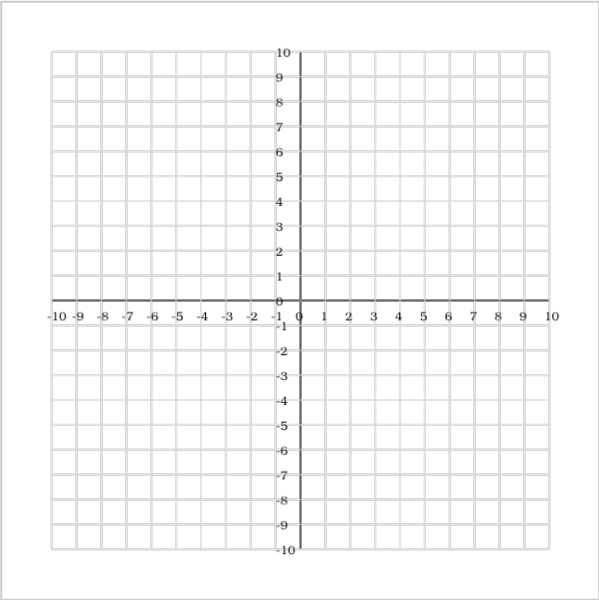
Plot the graph of y = 2x + 1



Line through (0,1) with gradient 2

2.

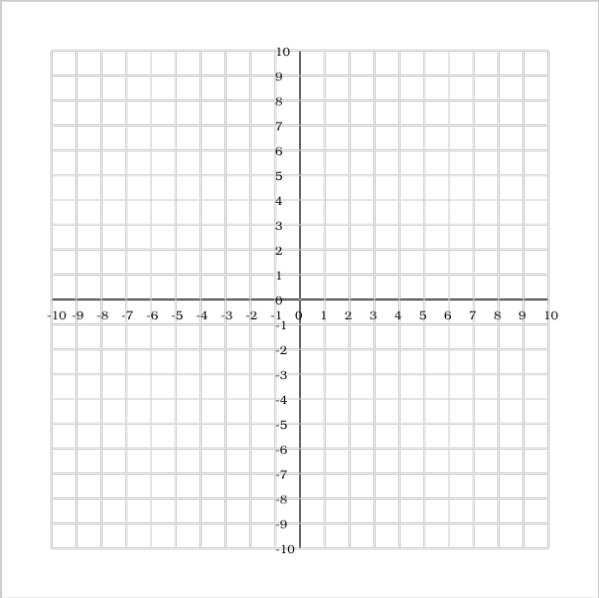
Plot the graph of y = -x + 3



Line through (0,3) with gradient -1

3.

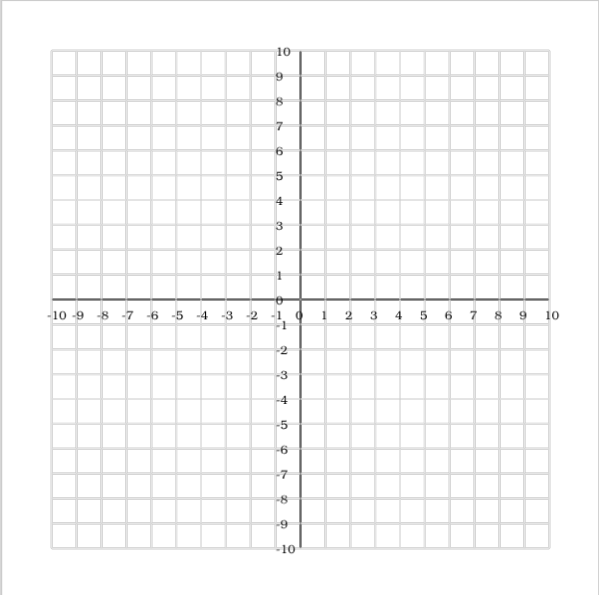
Plot the graph of y = 0.5x - 2



Line through (0,-2) with gradient 0.5

4.

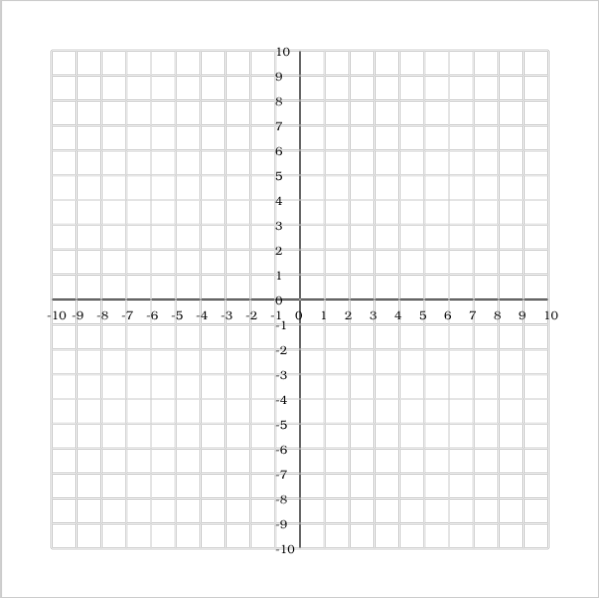
Plot the graph of y = -2x + 4



Line through (0,4) with gradient -2

5.

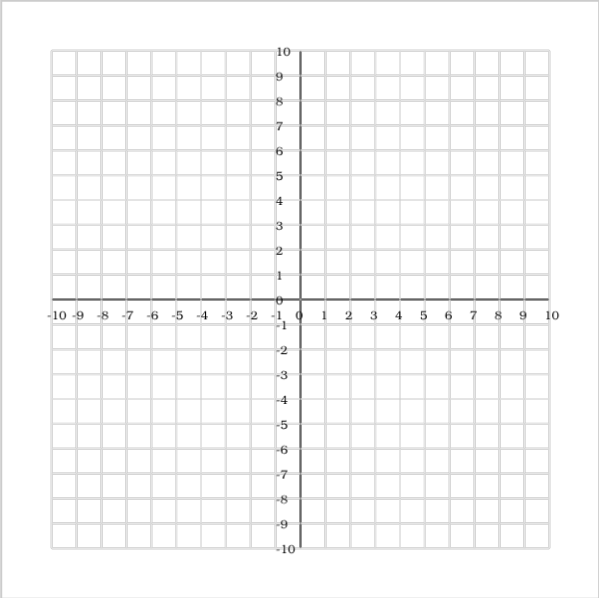
Plot the graph of y = 3x



> Line through (0,0) with gradient 3

6.

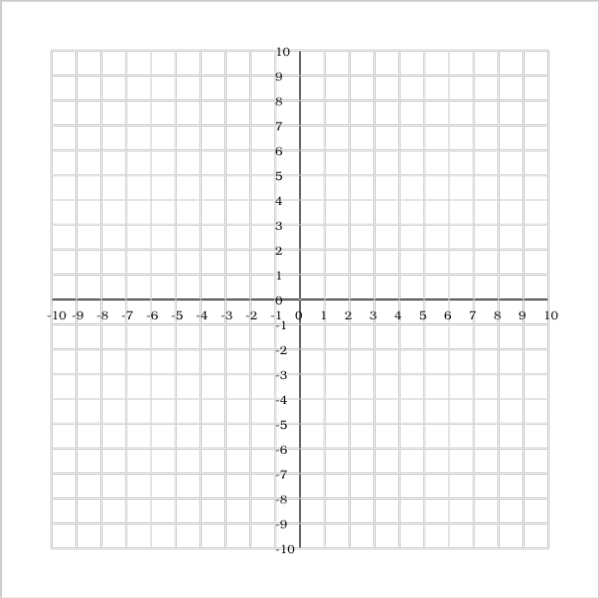
Plot the graph of y = -0.5x + 1



> Line through (0,1) with gradient -0.5

7.

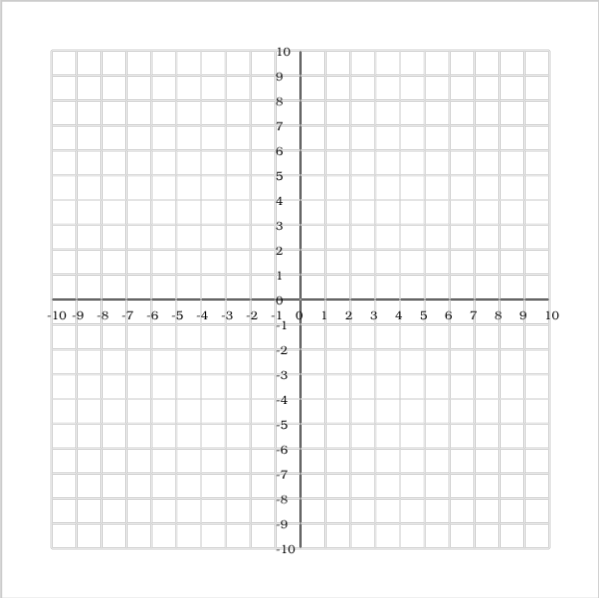
Plot the graph of y = 4x - 3



Line through (0,-3) with gradient 4

8.

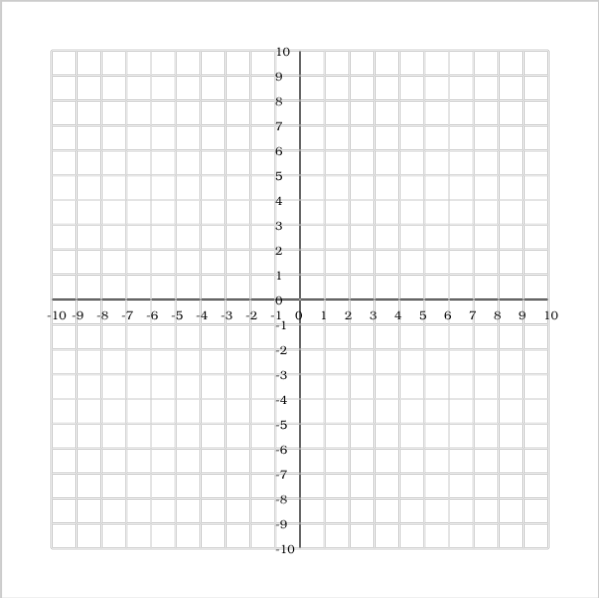
Plot the graph of y = -3x + 2



Line through (0,2) with gradient -3

9.

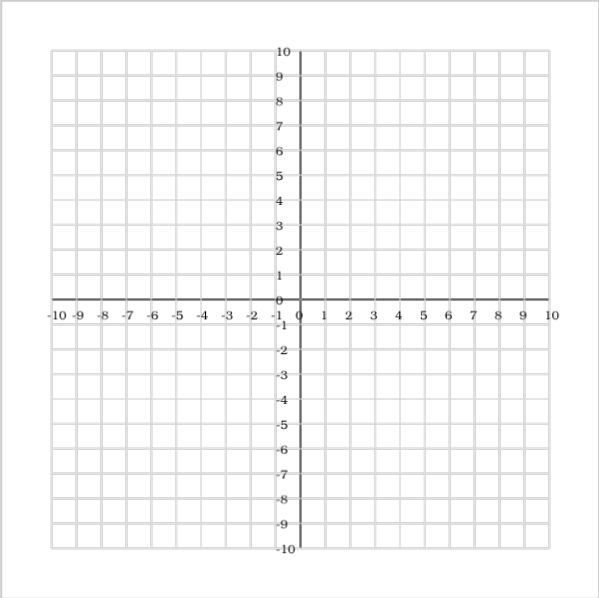
Plot the graph of y = 1.5x - 1



> Line through (0,-1) with gradient 1.5

10.

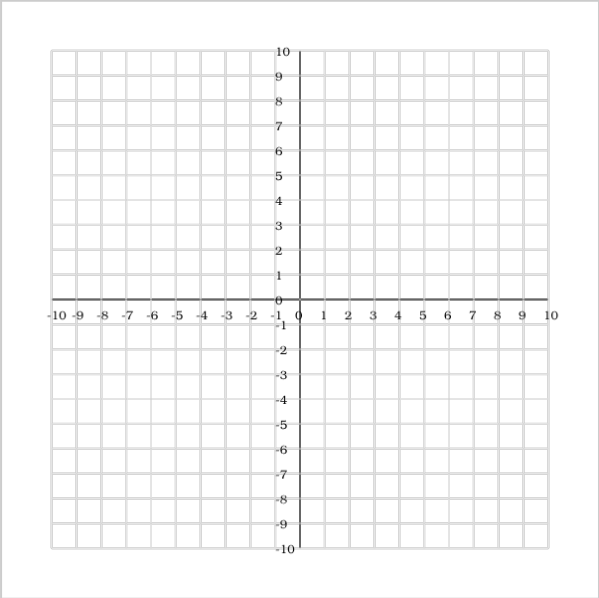
Plot the graph of y = -4x - 2



> Line through (0,-2) with gradient -4

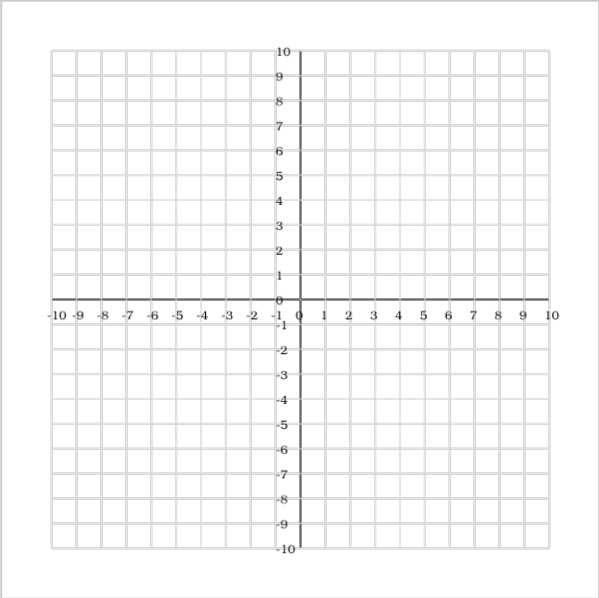
11.

Plot the graph of y = 2.5x + 0.5



12.

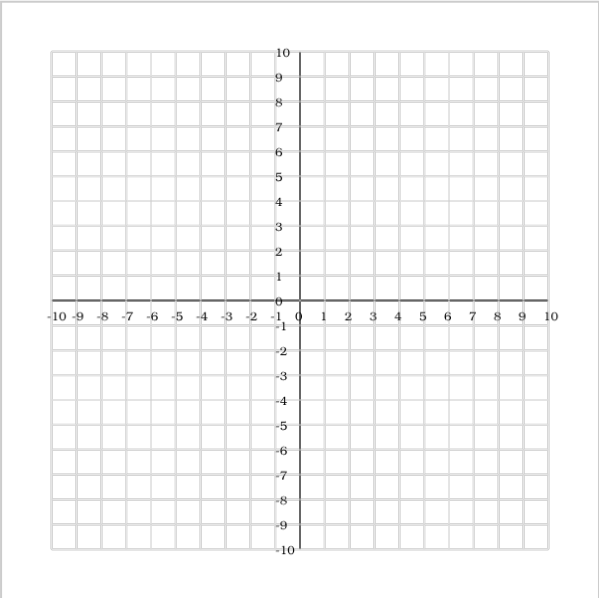
Plot the graph of y = -1.5x + 3.5



Line through (0,0.5) with gradient 2.5

13.

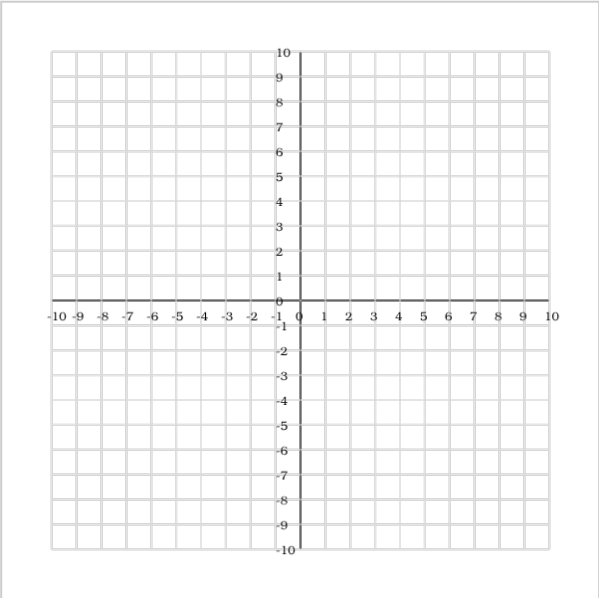
Plot the graph of y = 0.25x - 1.5



Line through (0,3.5) with gradient -1.5

14.

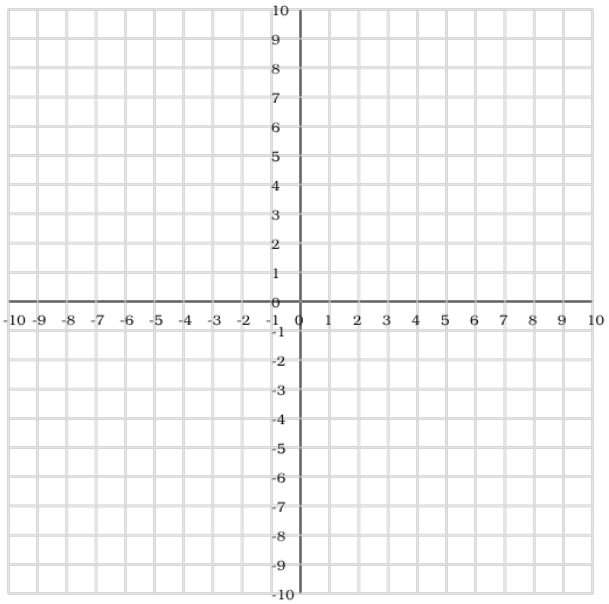
Plot the graph of y = -0.75x + 2.25



MASTER QUESTIONS

M1.

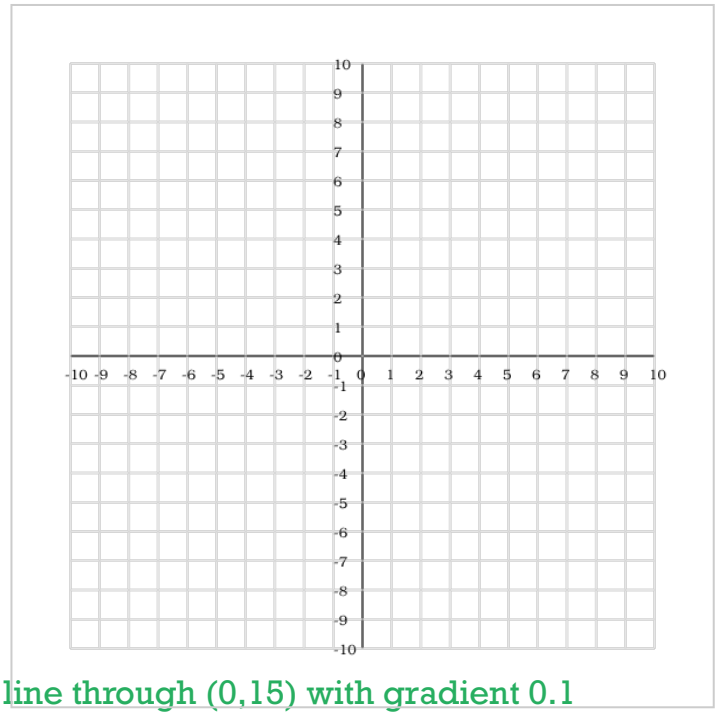
A taxi charges a £3 fixed fee plus £2 per mile. Write and plot the cost equation.



> y = 2x + 3, line through (0,3) with gradient 2

M2.

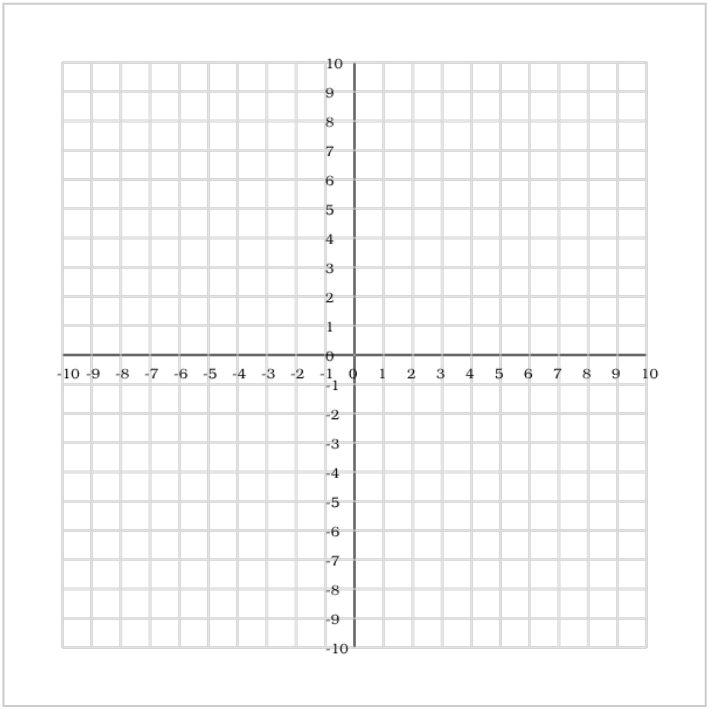
A phone plan costs £15 per month plus 10p per minute. Plot the monthly cost graph.



y = 0.1x + 15, line through (0,15) with gradient 0.1

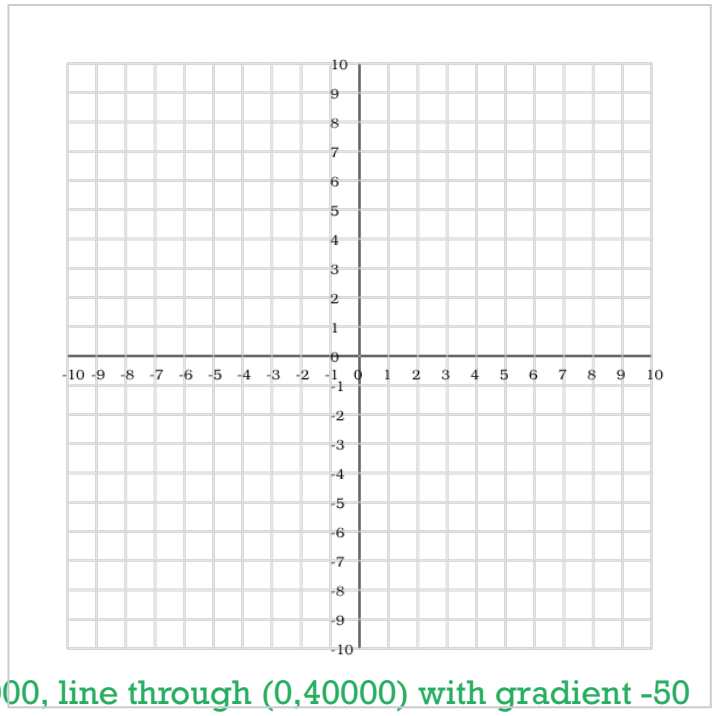
M3.

A car depreciates by £2000 per year from an initial value of £12000. Plot the value over time.



M4.

A swimming pool loses 50 litres per hour from 40000 litres. Plot the water volume over time.



y = -50x + 40000, line through (0,40000) with gradient -50

M5.

A candle burns at 2cm per hour from 20cm height. Plot the height against time.