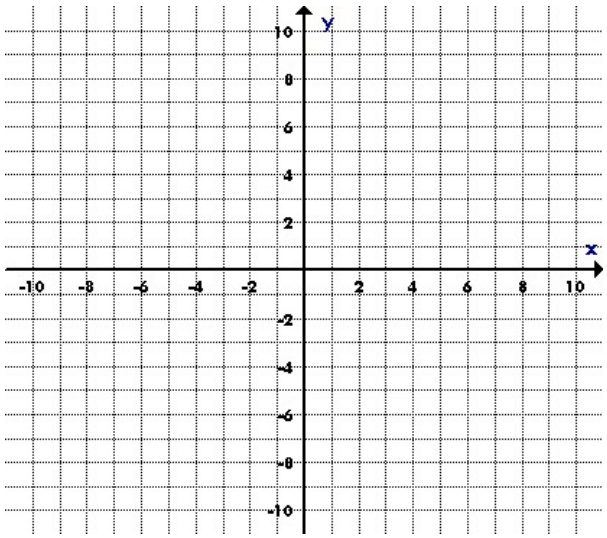
SOLVING LINEAR SYSTEMS OF EQUATIONS BY GRAPHING

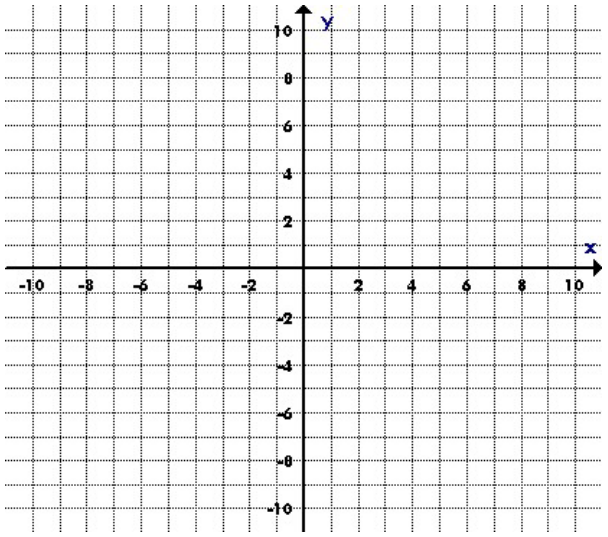
Solve each linear system graphically. Remember, **rearrange** the equations into $y = mx + b$ form to graph the lines first. **Don't forget to CHECK your solution.**

a) -x + y = 4 and 3x – y = 0



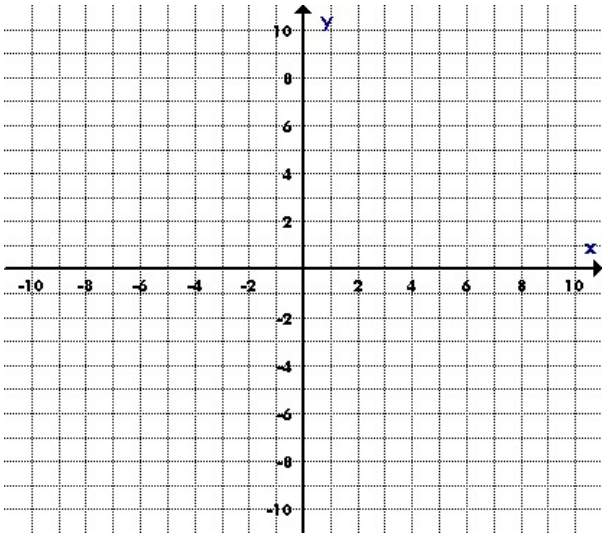
Check:

b) y = x + 5 and 4x + y – 10 = 0



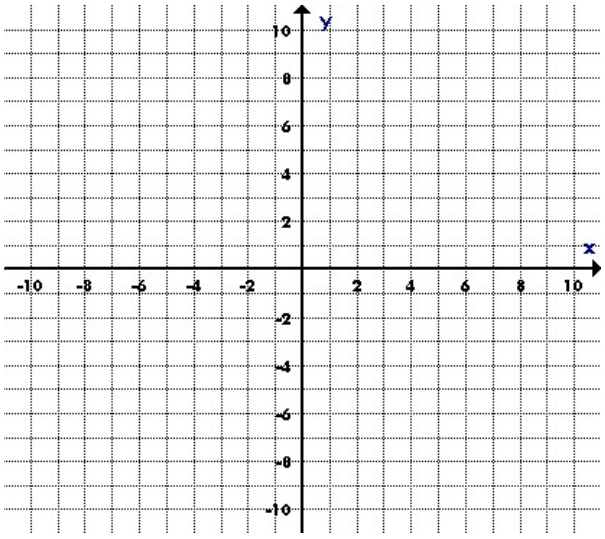
Check:

c) 3y – 2x = 12 and $y - \frac{4}{3}x - 6 = 0$



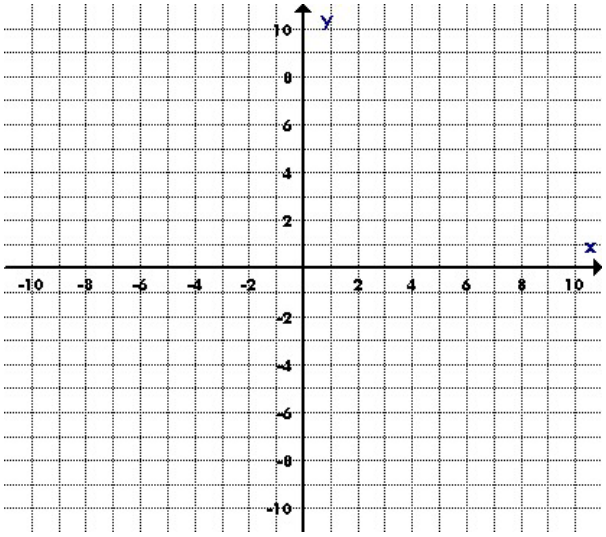
Check:

d) $7x + 2y = 6$ and $2x - 5y = -15$



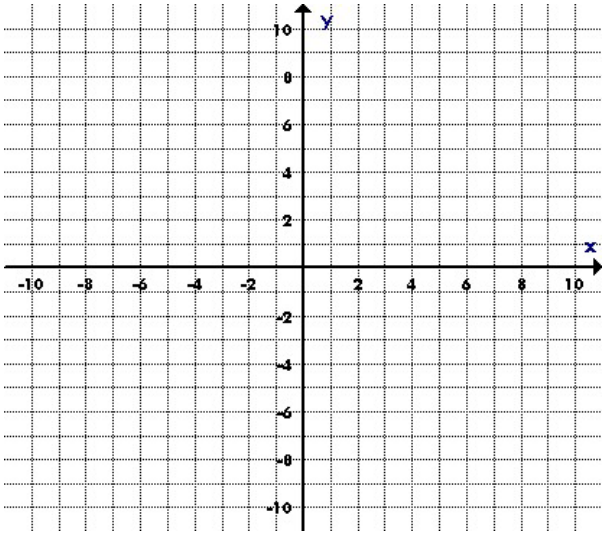
Check:

e) $-4x + y = 5$ and $3x + 2y = -12$



Check:

f) $2x + y = 1$ and $-4x - y = -1$



Check:

Answers: **a)** (2, 6) **b)** (1, 6) **c)** (-3, 2) **d)** (0, 3) **e)** (-2, -3) **f)** (0, 1)

APPLICATION QUESTIONS

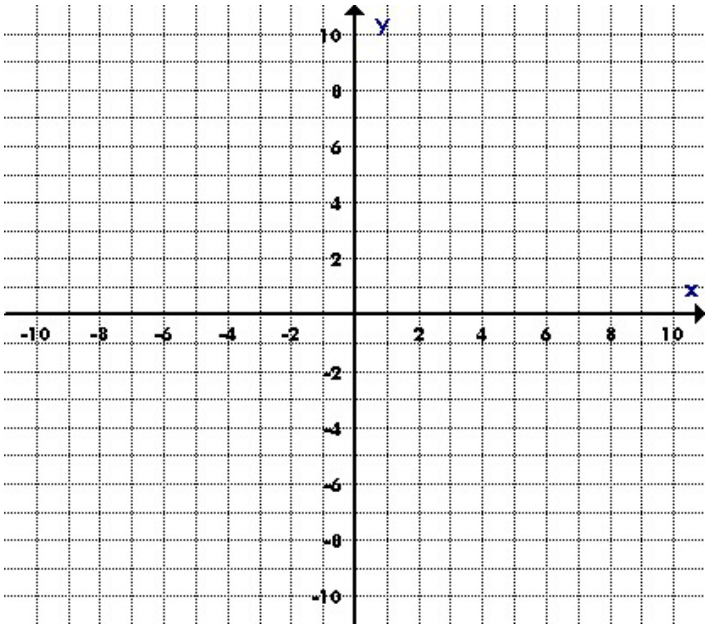
Make sure to finish the question with an answer statement

1. In Canada's Arctic, a coordinate system is one way of locating position. Two surveying crews trek along the following paths:

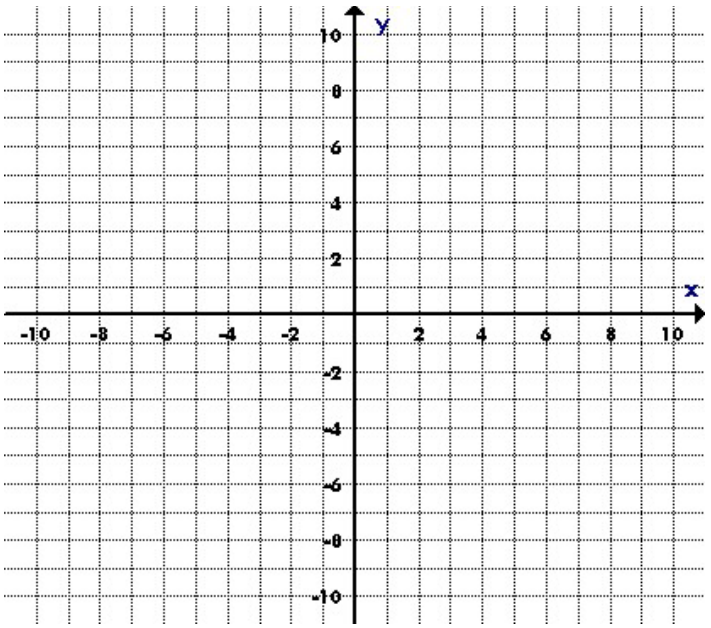
A: Survey crew Hollander: $y = \frac{4}{3}x + 4$

B: Survey crew Williams: $-2x - 6y - 36 = 0$

At which point might the two crews meet?



2. The position of a wrecked oil tanker is given at the intersection of $y = -2x + 5$ and $3x - 4y - 24 = 0$. Find the coordinates of its position.



Answers: **1)** (-6, -4) **2)** (4, -3)