

UB SAT 2009
Homework #12
Graphing Lines
Due: Mon, Mar 23

Graph each line. (Use any method of your choice)

1. $y = \frac{3}{2}x + 1$ 2. $y = 4x - 3$ 3. $y + 2x = 4$ 4. $2x - 3y = 6$

Graph the system on the same set of axes and find its solution. (Remember: the solution is where the two graphs intersect)

5. $y = \frac{1}{2}x - 3$
 $y + x = 3$

6. $2x - y = 4$
 $2y + x = 7$

BONUS:

The coordinates of the vertices of $\triangle ABC$ are $A(2r, 0)$, $B(0, 2s)$, and $C(0, r + s)$ where $r, s > 0$. If M is the midpoint of AB , what is an equation of CM ?

- (A) $y = x + r + s$
- (B) $y = -x + r + s$
- (C) $y = -x + s - r$
- (D) $y = \frac{s}{r}x$
- (E) $y = -x + \frac{1}{2}(r + s)$