

Show all necessary steps clearly, neatly, and systematically to receive full credit.

1. Solve:  $\left| \frac{1}{4}x - \frac{3}{8} \right| - \frac{2}{3} = -\frac{1}{2}$

2. Solve and write the solution set in interval notation:  $\left| \frac{5}{3} - \frac{1}{2}x \right| > \frac{2}{9}$

3. Solve and write the solution set in set-builder notation:  $5|2x - 3| + 7 \geq 14$

4. Solve:  $|2x - 5| = |-3x + 4|$

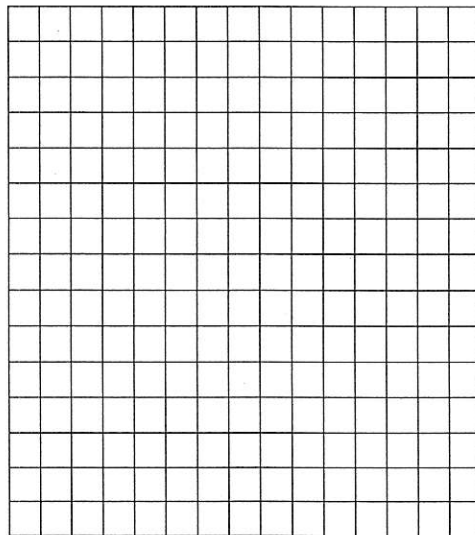
5. Solve and graph the solution set:  $2 - 5[3m - (m + 4)] > -2(m - 4)$

6. Solve and write the solution set in interval notation:  $3x - 7 > -10$  or  $5x + 2 \leq 22$

7. Solve:  $\frac{3x+7}{5} - \frac{x-2}{6} = \frac{2x+1}{9}$

8. Solve for  $P$ :  $A = P + Prt$

9. Let  $3x + 4y = -12$ . Find the slope and y-intercept.  
Then use them to graph.



Slope: \_\_\_\_\_

y-intercept: \_\_\_\_\_

10. Find the equation of the line contains the point  $(5, -4)$  and  $(-1, -2)$ . Write the result in standard form.

11. Find the equation of the line passes through a point  $(2, -3)$  and parallel to the line  $-3x + 5y = 5$ . Write the result in slope-intercept form.

12. In an isosceles triangle, one angle is 10 less than three times the measure of one of the equal angles. Find the measure of each angle.
13. In an IRA account valued at 49050, a couple has twice as many shares of stock in Big Bank Corporation as in Safe Savings and Loan. If Big Bank sells for \$115 per share and Safe Savings sells for \$97 per shares, how many shares of each does the couple own?