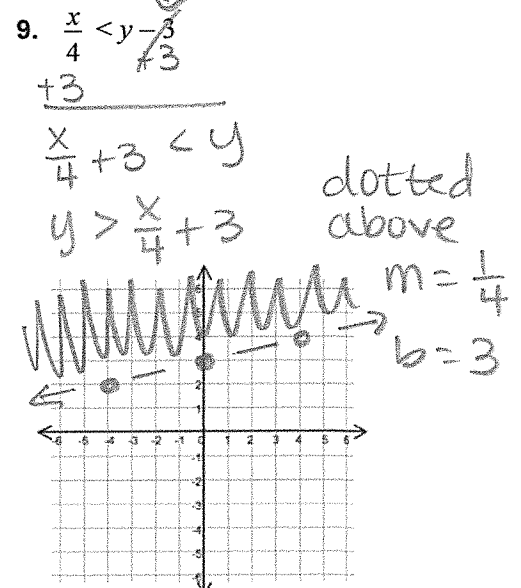
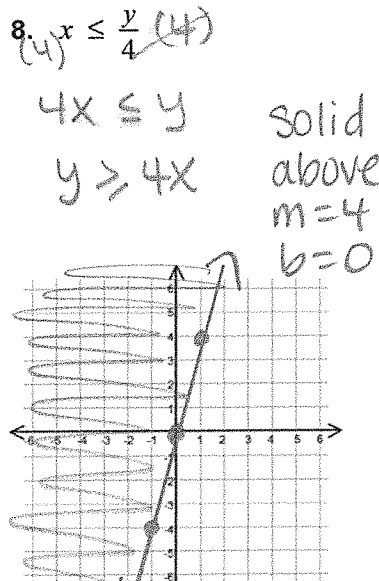
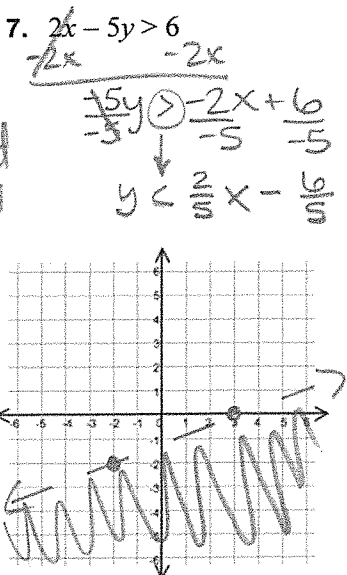
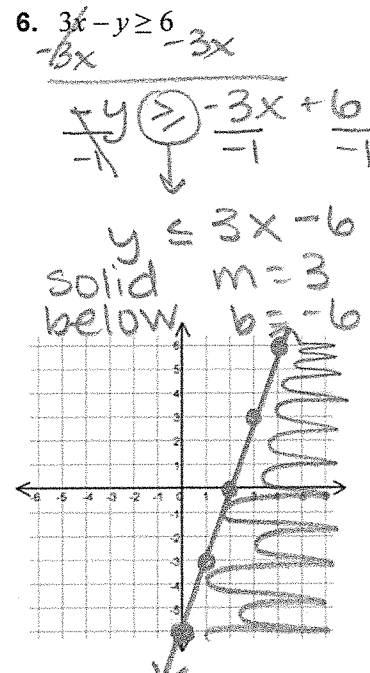
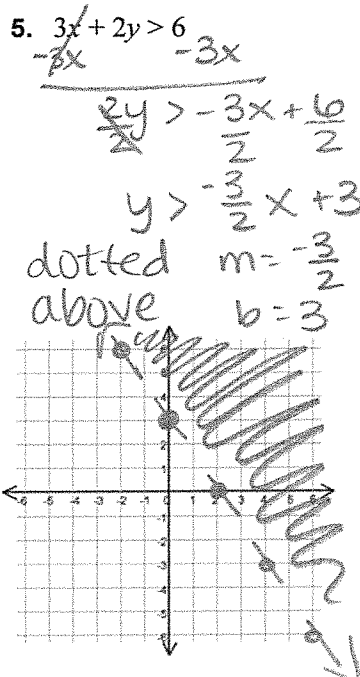
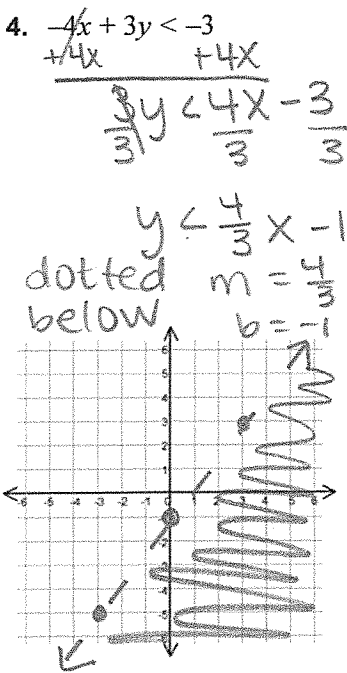
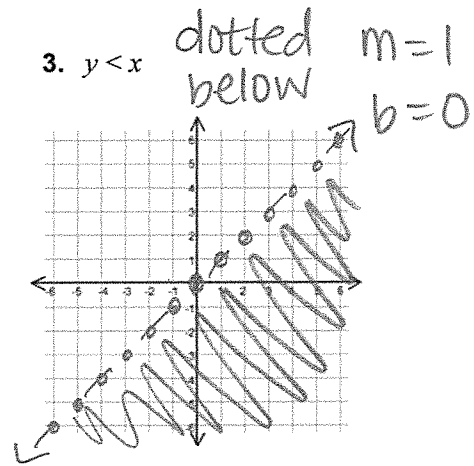
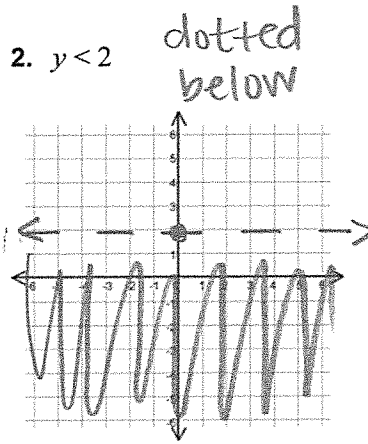
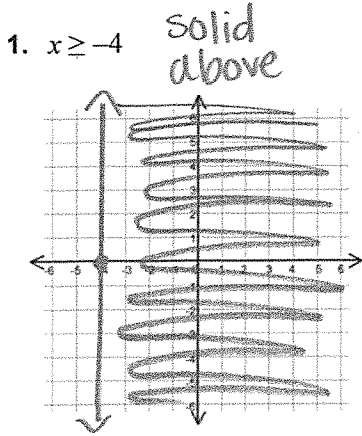


4-5 Practice

Form G

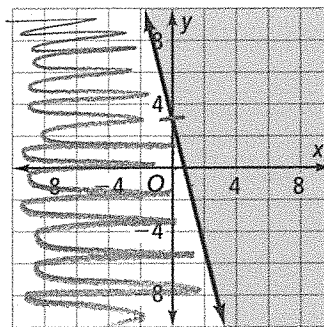
Linear Inequalities

Graph each linear inequality.



10. **Error Analysis** A student graphed $y \leq -4x + 3$ as shown. Describe and correct the student's error.

The boundary line is graphed correctly, but the shading of \leq should be below the line (left)



Determine whether the ordered pair is a solution of the linear inequality.

12. $7x + 2y > -5$; $(-1, 1)$

$$\begin{aligned} 7(-1) + 2(1) &> -5 \\ -7 + 2 &> -5 \\ -5 &> -5 \\ &\times \text{ (NO)} \end{aligned}$$

13. $x - y \leq 3$; $(2, -1)$

$$\begin{aligned} 2 - (-1) &\leq 3 \\ 2 + 1 &\leq 3 \\ 3 &\leq 3 \\ &\checkmark \text{ (yes)} \end{aligned}$$

14. $y + 2x > 5$; $(4, 1)$

$$\begin{aligned} 1 + 2(4) &> 5 \\ 1 + 8 &> 5 \\ 9 &> 5 \\ &\checkmark \text{ (yes)} \end{aligned}$$

15. $x + 4y \leq -2$; $(-8, -2)$

$$\begin{aligned} -8 + 4(-2) &\leq -2 \\ -8 - 8 &\leq -2 \\ -16 &\leq -2 \\ &\checkmark \text{ (yes)} \end{aligned}$$

16. $y < x + 4$; $(-9, -5)$

$$\begin{aligned} -5 &< -9 + 4 \\ -5 &< -5 \\ &\times \text{ (NO)} \end{aligned}$$

17. $y < 3x + 2$; $(3, 10)$

$$\begin{aligned} 10 &< 3(3) + 2 \\ 10 &< 30 + 2 \\ 10 &< 32 \\ &\checkmark \text{ (yes)} \end{aligned}$$