SECONDARY MATHI // MODULE 5

## READY

Topic: Using substitution to find a missing value.
Substitute the given value of $x$ into the equation to find the value of $y$.

1. $5 x-9 y=73 ; x=2$
2. $-4 x+9 y=16 ; x=5$
3. $3 x-8 y=1 ; x=-5$
4. $-14 x+5 y=51 ; x=1$
5. $9 x-7 y=21 ; x=0$
6. $12 x-15 y=-42 ; x=\frac{1}{4}$

Use the given value to find the value of the other variable that is not provided.
7. $5 a+2 b=-37$
8. $13 f-7 g=10$
$b=-1$
$f=-3$
9. $2 m+3 z=-22$ $z=-9$

## SET

Topic: Examining the impact of the direction of the inequality symbol
10. Graph $y>\frac{3}{4} x-2$ and $y<\frac{3}{4} x+3$ on the grid at the right.
11. What is the relationship between the two lines in your graph?
12. Name 3 points that satisfy both inequalities.
13. Now, graph $y<\frac{3}{4} x-2$ and $y>\frac{3}{4} x+3$
 on the next grid at the right.
14. Can you name 3 points that satisfy both inequalities for this system?
15. Compare the graph for problem 10 with the graph for problem 13. How are they the same?

How are they different?


Mathematics Vision Project

Topic: Graphing linear inequalities

## Graph each inequality.

16. $y \leq 3 x-4$

17. $3 x+4 y<12$

18. $y \leq-2 x+3$

19. $\quad 6 x+8 y \leq 24$

20. $y>4 x-3$

21. $5 x+3 y \leq 15$

