

SOLVE LINEAR SYSTEMS USING ELIMINATION

1. Solve each linear system.

a) $x + 3y = 5$
 $5x + 2y = 12$

Multiply one of the equations:

Add or subtract the equations to eliminate
one of the variables and then solve:

Solve for the other variable:

Solution:

b) $3x + 2y = 2$
 $x + 4y = 14$

Multiply one of the equations:

Add or subtract the equations to eliminate
one of the variables and then solve:

Solve for the other variable:

Solution:

c) $3x - y = 2$
 $2x + 3y = 16$

Multiply one of the equations:		
Add or subtract the equations to eliminate one of the variables and then solve:	Solve for the other variable:	Solution:

2. A local band called Rawk held a concert where 5000 people attended with x representing the number of lower bowl tickets and y representing the number of upper bowl seating tickets.

This is represented by the equation: $x + y = 5000$

The lower bowl tickets cost \$60 while the upper bowl tickets cost \$40. Ticket sales totaled \$264 000.

This is represented by the equation: $60x + 40y = 264\ 000$

How many lower bowl and upper bowl tickets were sold?