

# Algebra 1

## Lesson 7.3 Solving By Elimination Homework

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2. ★ **WRITING** Explain how to solve the linear system shown using the elimination method.
- $$2x - y = 2 \quad \text{Equation 1}$$
- $$2x + 3y = 22 \quad \text{Equation 2}$$

Solve using elimination.

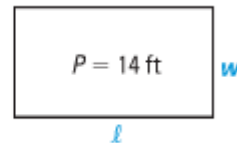
4.  $9x + y = 2$   
 $-4x - y = -17$

9.  $x + y = 1$   
 $-2x + y = 4$

18.  $2x - y = -11$   
 $y = -2x - 13$

21.  $-5x + y = -23$   
 $-y = 3x - 9$

35. 🌐 **GEOMETRY** The rectangle has a perimeter  $P$  of 14 feet, and twice its length  $\ell$  is equal to 1 less than 4 times its width  $w$ . Write and solve a system of linear equations to find the length and the width of the rectangle.



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- 40. OIL CHANGE** Two cars get an oil change at the same service center. Each customer is charged a fee  $x$  (in dollars) for the oil change plus  $y$  dollars per quart of oil used. The oil change for the car that requires 5 quarts of oil costs \$22.45. The oil change for the car that requires 7 quarts of oil costs \$25.45. Find the fee and the cost per quart of oil.

- 41. PHONES** Cellular phone ring tones can be monophonic or polyphonic. Monophonic ring tones play one tone at a time, and polyphonic ring tones play multiple tones at a time. The table shows the ring tones downloaded from a website by two customers. Use the information to find the cost of a monophonic ring tone and a polyphonic ring tone, assuming that all monophonic ring tones cost the same and all polyphonic ring tones cost the same.

Customer	Monophonic ring tones	Polyphonic ring tones	Total cost (dollars)
Julie	3	2	12.85
Tate	1	2	8.95

- 44. ★ SHORT RESPONSE** The students in the graduating classes at the three high schools in a school district have to pay for their caps and gowns. A cap-and-gown set costs  $x$  dollars, and an extra tassel costs  $y$  dollars. At one high school, students pay \$3262 for 215 cap-and-gown sets and 72 extra tassels. At another high school, students pay \$3346 for 221 cap-and-gown sets and 72 extra tassels. How much will students at the third high school pay for 218 cap-and-gown sets and 56 extra tassels? *Explain.*