

5-2 Solving Systems by Combining (Elimination)

Name: _____

Time> Start: _____ Finish: _____ Total Time = _____

Solve each system of equations.

_____ 1.

$$\begin{cases} 2x + y = 5 \\ x - y = 1 \end{cases}$$

_____ 2.

$$\begin{cases} 3x + 2y = 17 \\ x - y = 4 \end{cases}$$

_____ 3.

$$\begin{cases} 2x + 3y = 5 \\ 4x - 2y = 2 \end{cases}$$

_____ 4.

$$\begin{cases} 3x + 2y = 17 \\ 2x + 5y = 15 \end{cases}$$

_____ 5.

$$\begin{cases} 4x + 4y = 8 \\ 5x - 3y = 10 \end{cases}$$

_____ 6.

$$\begin{cases} 3x + 2y = 11 \\ 3x - 2y = 7 \end{cases}$$

_____ 7.

For \$2.10, you can get 3 eggs and a cup of coffee.
For \$2.60, you can get 4 eggs and a cup of coffee.
How much are you paying for the coffee?

_____ 8.

I plan on taking a vacation on a Cruise Ship this winter.
A 4 day cruise with 10 included meals cost \$600.
A 5 day cruise with 12 meals cost \$745.
How much are they charging me for each day on the ship?

SAT Questions

- _____ 19. A restaurant has 19 tables that can seat a total of 84 people. Some of the tables seat 4 people and the others seat 5 people. How many tables seat 5 people?
- _____ 20. A cooler filled with cans of soda weighs 20 pounds. After three-quarters of the cans of soda have been consumed, the cooler, together with the remaining sodas, weighs 14 pounds. If each can of soda weighs the same, how much does the empty cooler weigh?
- _____ 21. Mike sold a total of 48 sodas at a snack stand. The stand sells only cola and root beer. If he sold twice as many colas as root beers, how many root beers did he sell?
A. 32 B. 24 C. 18 D. 16 E. 8
- _____ 22. Admission to a museum is \$10 for each adult and \$5 for each child. If a group of 30 people pays a total of \$175 in admission, how many adults are in the group?