

Solve each system by elimination:

$$1) \begin{cases} 2x + y = 3 \\ 5x - y = 11 \end{cases}$$

$$2) \begin{cases} 3x - 2y = 10 \\ -3x + 12y = 30 \end{cases}$$

$$3) \begin{cases} 2x + 3y = -4 \\ -2x + y = 6 \end{cases}$$

$$4) \begin{cases} 2x + 3y = 14 \\ -3x + y = 23 \end{cases}$$

$$5) \begin{cases} 2x + 4y = 0 \\ 5x + 2y = 6 \end{cases}$$

$$6) \begin{cases} 2x + 3y = -3 \\ 3x + 5y = -9 \end{cases}$$

$$7) \begin{cases} 3x - 10y = -5 \\ 6x - 8y = 14 \end{cases}$$

$$8) \begin{cases} 3x - 5y = 14 \\ -2x + 6y = -16 \end{cases}$$

$$9) \begin{cases} 5x - y = 3 \\ -10x + 2y = 2 \end{cases}$$

$$10) \begin{cases} 2x - 3y = 10 \\ -4x + 6y = -20 \end{cases}$$

Solve each by using a system:

11) Ann has \$5000 to invest. She invests in two different accounts, one account earns 4.5% annual interest and the other more risky account earns 9%. How much should she invest in each to earn \$382.50 for the year?

12) You have a total of \$2650 to invest. Account A earns 5% annual interest while account B earns 6.5% annually. How much should you invest in each to earn \$155 at the end of the year?

13) To ride a roller coaster adults and children pay a different ticket price. One day 5 adults and 8 children rode for a total of \$48.50. Another day a group of 4 adults and 12 children paid \$57 to ride. What is the price of each ticket?

14) Barbie wants to invest part of her \$24,000 in a stock fund that earns 4% annual interest and the rest in a growth fund that earns 6.5% annually. How much should Barbie invest in each to earn \$1360 in interest by the end of the year?

15) In a triangle, the measure of the first angle is 10° less than three times the second angle. If the measure of the third angle is 30° , Find the measure of the first and second angles.