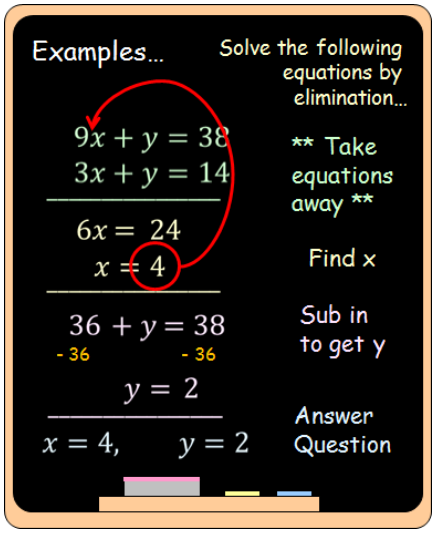
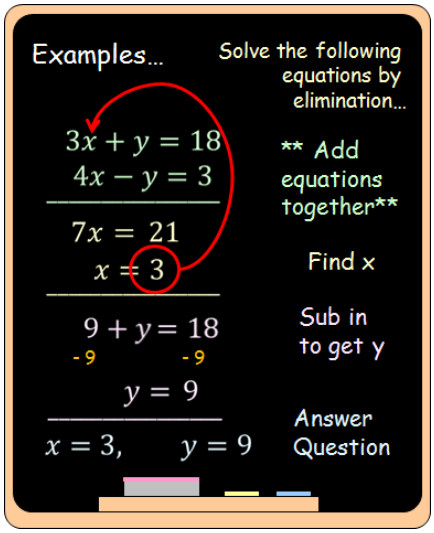
Outcome 1 – Solving Simultaneous Equations by elimination

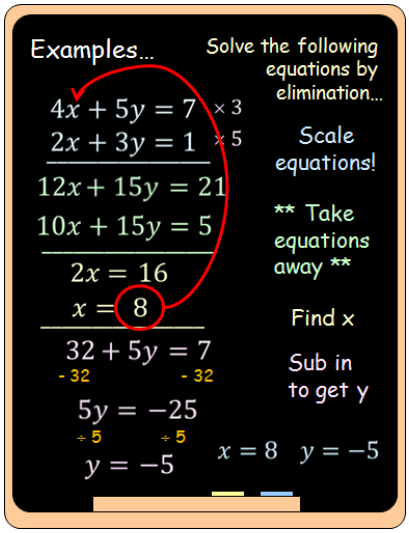
Bronze example



Silver example



Gold example



Bronze Questions

Solve the following sets of simultaneous equations...

1. $2x + y = 11$, $x + y = 6$
2. $4x + y = 22$, $2x + y = 12$
3. $7x + y = 24$, $3x + y = 12$
4. $4x + y = 14$, $x + y = 5$
5. $6x + y = 26$, $x + y = 6$
6. $6x + y = 14$, $2x + y = 6$
7. $2x + y = 9$, $x + y = 5$
8. $7x + y = 39$, $3x + y = 19$
9. $3x + y = 11$, $x + y = 5$
10. $4x + y = 13$, $x + y = 4$

Silver Questions

Solve the following sets of simultaneous equations...

1. $3x + y = 18$, $3x - y = 18$
2. $4x + y = 13$, $4x - y = 11$
3. $4x + y = 25$, $3x - y = 3$
4. $2x + y = 11$, $7x - y = 25$
5. $2x + y = 8$, $5x - y = 20$
6. $6x + y = 32$, $2x - y = 0$
7. $3x + y = 12$, $x - y = 0$
8. $4x + y = 29$, $3x - y = 6$
9. $3x + y = 20$, $3x - y = 4$
10. $3x + y = 19$, $4x - y = 16$

Gold Questions

Solve the following sets of simultaneous equations...

1. $5x + 2y = 2$, $9x + 4y = 2$
2. $7x + 2y = 9$, $8x + 3y = 1$
3. $3x + 2y = 10$, $2x - 3y = 11$
4. $5x + 2y = 9$, $4x + 3y = 3$
5. $3x + 2y = 1$, $5x - 3y = 84$
6. $4x + 3y = 5$, $3x + 5y = 1$
7. $3x + 2y = 14$, $2x + 3y = 1$
8. $2x + 3y = 11$, $5x - 2y = 18$
9. $5x + 3y = 21$, $3x - 2y = 5$
10. $5x + 4y = 23$, $2x + 3y = 5$

Bronze Answers

1. $x = 5,\ y = 1$
2. $x = 5,\ y = 2$
3. $x = 3,\ y = 3$
4. $x = 3,\ y = 2$
5. $x = 4,\ y = 2$
6. $x = 2,\ y = 2$
7. $x = 4,\ y = 1$
8. $x = 5,\ y = 4$
9. $x = 3,\ y = 2$
10. $x = 3,\ y = 1$

Silver Answers

1. $x = 6,\ y = 0$
2. $x = 3,\ y = 1$
3. $x = 4,\ y = 9$
4. $x = 4,\ y = 3$
5. $x = 4,\ y = 0$
6. $x = 4,\ y = 8$
7. $x = 3,\ y = 3$
8. $x = 5,\ y = 9$
9. $x = 4,\ y = 8$
10. $x = 5,\ y = 4$

Gold Answers

1. $x = 2,\ y = -4$
2. $x = 5,\ y = -13$
3. $x = 4,\ y = -1$
4. $x = 3,\ y = -3$
5. $x = 9,\ y = -13$
6. $x = 2,\ y = -1$
7. $x = 8,\ y = -5$
8. $x = 4,\ y = 1$
9. $x = 3,\ y = 2$
10. $x = 7,\ y = -3$