Systems of Equations - Substitution Method

Solve each system of equations using substitution method.

1) \(5x + 2y = 16\)
\(x + 8y = 26\)

2) \(c + 6d = 7\)
\(-c - 2d = -2\)

3) \(8p + 7q = 43\)
\(2p - 7 = -q\)

4) \(-5a + b = 8\)
\(7a + 9b = -32\)

5) \(-5 = 2m + 6n\)
\(4m + 5n - 18 = 0\)

6) \(v = 2 - 6u\)
\(9u + 2v = 3\)

7) \(r + 2s = 4\)
\(3s + r = 1\)

8) \(6y + 5z = 0\)
\(3z = 7y + 53\)
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1) \[5x + 2y = 16\]
   \[x + 8y = 26\]
   \((2, 3)\)

2) \[c + 6d = 7\]
   \[−c − 2d = −2\]
   \((-\frac{1}{2}, \frac{5}{4})\)

3) \[8p + 7q = 43\]
   \[2p − 7 = −q\]
   \((1, 5)\)

4) \[−5a + b = 8\]
   \[7a + 9b = −32\]
   \((-2, −2)\)

5) \[−5 = 2m + 6n\]
   \[4m + 5n − 18 = 0\]
   \((\frac{19}{2}, −4)\)

6) \[v = 2 − 6u\]
   \[9u + 2v = 3\]
   \((\frac{1}{3}, 0)\)

7) \[r + 2s = 4\]
   \[3s + r = 1\]
   \((10, −3)\)

8) \[6y + 5z = 0\]
   \[3z = 7y + 53\]
   \((-5, 6)\)