Name : _____

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) $6y + 5z = 0$
$3z = 7y + 53$

_____

Name : _____

Answer key

Sheet 1

Systems of Equations - Substitution Method

Solve each system of equations using substitution method.

1) $5x + 2y = 16$
$x + 8y = 26$

(2, 3)

2) $c + 6d = 7$
$-c - 2d = -2$

$\left(-\frac{1}{2}, \frac{5}{4}\right)$

3) $8p + 7q = 43$
$2p - 7 = -q$

(1, 5)

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

(–2, –2)

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

$\left(\frac{19}{2}, -4\right)$

6) $v = 2 - 6u$
$9u + 2v = 3$

$\left(\frac{1}{3}, 0\right)$

7) $r + 2s = 4$
$3s + r = 1$

(10, –3)

8) $6y + 5z = 0$
$3z = 7y + 53$

(–5, 6)