Student Name: _____ Score:

Determinants – Cramer's Rule

Sheet 2

Identify the number of solutions using Cramer's rule:

$3x-4y=5$
$8x+3y=7$

$\Delta =$ ☐

$\Delta x =$ ☐ $\Delta y =$ ☐

Number of Solu

$2x+3y=5$
$5x+6y=12$

$\Delta =$ ☐

$\Delta x =$ ☐ $\Delta y =$ ☐

: _____

$8x-3y=4$
$-5x+7y=12$

$\Delta =$ ☐

$\Delta x =$ ☐

Number of Solu

$y =$ ☐

: _____

$4x+3y=5$
$8x+6y=7$

$\Delta =$ ☐

$\Delta x =$ ☐ $\Delta y =$ ☐

Number of Solutions: _____

$\Delta x =$ ☐ $\Delta y =$ ☐

Number of Solutions: _____

Student Name: _____ Score:

Answer key

Determinants – Cramer's Rule

Sheet 2

$3x-4y=5$
$8x+3y=7$

$\Delta=41\neq 0$
$\Delta x=43;\Delta y=-19$
Number of Solutions : Unique

$2x+3y=5$
$5x+6y=12$

$\Delta=-3\neq 0$
$\Delta x=-6;\Delta y=-1$
Number of Solutions : Unique

$8x-3y=4$
$-5x+7y=12$

$\Delta=41\neq 0$
$\Delta x=64;\Delta y=11$
Number of Solu : Infinite

$4x+3y=5$
$8x+6y=7$

$\Delta=0$
$\Delta x=9\neq 0;\ \Delta y=$ $31\neq 0$
Number of Solutions : None

Number of Solutions : None