Student Name: _____ Score:

Determinants – Cramer's Rule

ES2

Solve the following system of equations using Cramer's rule:

$4x-5y=-7$
$2x+3y=13$

$\Delta =$ ☐

$\Delta x =$ ☐ $\Delta y =$ ☐

$x =$ ☐

$4x+3y=14$
$-5x+2y=-6$

$\Delta =$ ☐

$\Delta x =$ ☐ $\Delta y =$ ☐

$y =$ ☐

$-9x+2y=25$
$8x-5y=-19$

$\Delta =$ ☐

$\Delta x =$ ☐

$x =$ ☐

$y =$ ☐

$y =$ ☐

$4x-3y=1$
$9x-7y=1$

$\Delta =$ ☐

$\Delta x =$ ☐ $\Delta y =$ ☐

$x =$ ☐ $y =$ ☐

$\Delta =$ ☐

$\Delta x =$ ☐ $\Delta y =$ ☐

$x =$ ☐ $y =$ ☐

Student Name: _____ Score:

Answer key

Determinants – Cramer's Rule

ES2

$4x-5y=-7$
$2x+3y=13$

$\Delta=22$
$\Delta x=44;\Delta y=66$
$x=\frac{\Delta x}{\Delta}=2;y=\frac{\Delta y}{\Delta}=3$

$4x+3y=14$
$-5x+2y=-6$

$\Delta=23$
$\Delta x=46;\Delta y=46$
$x=\frac{\Delta x}{\Delta}=2;y=\frac{\Delta y}{\Delta}=2$

$-9x+2y=25$
$8x-5y=-19$

$\Delta=29$
$\Delta x=-87;\Delta y=-$
$x=\frac{\Delta x}{\Delta}=-3;y=$ $=-3$

$4x-3y=1$
$9x-7y=1$

$\Delta=-1$
$\Delta x=-4;\Delta y=-5$
$x=\frac{\Delta x}{\Delta}=4;y=\frac{\Delta y}{\Delta}=5$

$\Delta=-12$
$\Delta x=-48;\Delta y=72$
$x=\frac{\Delta x}{\Delta}=4;y=\frac{\Delta y}{\Delta}=-6$