Student Name: _____

Score:

Determinants – Cramer's Rule

Three Variables: ES2

Identify the solutions using Cramer's rule:

$$2x + 3y - 4z = 17$$

$$8x - 5y + 5z = -4$$

$$3x - 4y - 4z = -2$$

$$\Delta = \boxed{ } \Delta x = \boxed{ } \Delta y = \boxed{ } \Delta z = \boxed{ }$$

$$x =$$
 $y =$

$$y =$$

$$z =$$

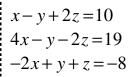
$\begin{array}{c|c} & \textbf{PREVIEW} \\ 2x+5y-z=-7 \end{array}$

$$2x+5y-z=-7$$

$$-6x-y+3z=-7$$

$$-7x+4y+4z=-16$$

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$$\int \Delta z = \boxed{}$$

$$z =$$

$$\Delta z =$$

$$z =$$

3x+3y-7z=11 -4x-6y+z=-19 3x+5y-7z=7

$$\Delta = \bigcirc \qquad \Delta x = \bigcirc \qquad \Delta y = \bigcirc \qquad \Delta z = \bigcirc \qquad$$

$$x =$$
 $y =$ $z =$

Student Name:

Answer key

Determinants – Cramer's Rule

Three Variables: ES2

Score:

 $\Delta = 289$

$$\Delta x = 578; \Delta y = 867; \Delta z = -289$$

$$x = \frac{\Delta x}{\Delta} = 2$$
; $y = \frac{\Delta y}{\Delta} = 3$; $z = \frac{\Delta z}{\Delta} = -1$

 $\Delta = 14$

$$\Delta x = 56; \Delta y = -28; \Delta$$

$$x = \frac{\Delta x}{\Delta} = 4; y = \frac{\Delta y}{\Delta} =$$

PREVIEW

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 $\Delta = 5$ $\Delta x = 35; \Delta y = 15; \Delta z = 5$ $x = \frac{\Delta x}{\Delta} = 7; y = \frac{\Delta y}{\Delta} = 5$

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 $\Delta = 50$

$$\Delta x = 400; \Delta y = -100; \Delta z = 50$$

$$x = \frac{\Delta x}{\Lambda} = 8$$
; $y = \frac{\Delta y}{\Lambda} = -2$; $z = \frac{\Delta z}{\Lambda} = 1$