**4)** Jasmine bought 2 pounds of ham and 1 pound of cheese from the deli and paid $15.90. She went back the following week and bought 3 pounds of ham and 1.5 pounds of cheese and paid $23.85. If the prices remained the same, find the price per pound of ham and cheese.

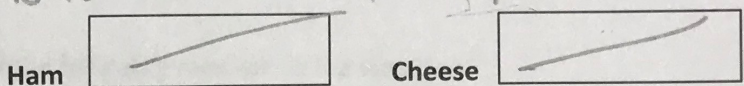$h$: price/lb ham

$c$: price/lb cheese

$2h + c = 15.90 \rightarrow c = -2h + 15.90$

$3h + 1.5c = 23.85$

$3h + 1.5(-2h + 15.90) = 23.85$

$3h - 3h + 23.85 = 23.85$

infinitly many solutions

**Ham** _____   **Cheese** _____

**5)** Solve using the method of your choice.

$2x + 3y = -35$

$3(8x - y = -23)$

$2x + 3y = -35$

$+\ \ 24x - 3y = -69$

$26x = -104$

$x = -4$

$8(-4) - y = -23$

$-32 - y = -23$

$-y = 9$

$y = -9$

$(-4, -9)$

**6)** Solve using the method of your choice.

$5(6x - y = -23) \rightarrow 30x - 5y = -115$

$2x + 5y = -13$

$2x + 5y = -13$

$32x = -128$

$x = -4$

$(-4, -1)$

$6(-4) - y = -23$

$-24 - y = -23$

$-y = 1$

$y = -1$

**7)** Describe the graph of the following system of equations as intersecting lines, parallel lines, or the same line. Then explain whether the system has one solution, no solution, or infinitely many solutions.

$y = -\frac{1}{2}x - 2$

1. $3x + 6y = -12$

   $y = -\frac{1}{2}x - 5$

// lines

No Solution

2. $2y = 8x + 18 \rightarrow y = 9x + 18$

   $24 + 4y = x$   $y = \frac{1}{4}x - 6$

intersecting lines

one solution.

3. $-y = -x + 6 \rightarrow y = x + 6$

   $3x + 18 = 3y$   $y = x + 6$

// lines

no solution