Algebra 1 Bellwork Monday, January 12, 2015

Solve each system of equations using Elimination. Give your answer as an ordered pair.

1.

$4x - 5y = 64$

$3x - 5y = 58$

2.

$6c + 14d = 82$

$-6c - 7d = -68$

3.

$9m - 8n = -7$

$10m + 2n = -35$

4.

$12P + 5Q = 57$

$8P + 7Q = -17$

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Solve each system of equations using Elimination. Give your answer as an ordered pair.

1.

$4x - 5y = 64$

$-\ 3x - 5y = 58$

$x = 6$

$(6, -8)$

$3(6) - 5y = 58$

$18 - 5y = 58$

$-18 \quad -18$

$-5y = 40$

$y = -8$

2.

$6c + 14d = 82$

$+\ -6c - 7d = -68$

$7d = 14$

$d = 2$

$(9, 2)$

$6c + 14(2) = 82$

$6c + 28 = 82$

$-28 \quad -28$

$6c = 54$

$c = 9$

3.

$9m - 8n = -7$

$4(10m + 2n = -35)$

$9m - 8n = -7$

$+\ 40m + 8n = -140$

$49m = -147$

$m = -3$

$(-3, -2.5)$

$10(-3) + 2n = -35$

$+30 \quad +30$

$2n = -5$

$n = -2.5$

4.

$2(12P + 5Q = 57)$

$3(8P + 7Q = -17)$

$24P + 10Q = 114$

$-\ 24P + 21Q = -51$

$-11Q = 165$

$Q = -15$

$(11, -15)$

$8P + 7(-15) = -17$

$8P - 105 = -17$

$+105 \quad +105$

$8P = 88 \quad P = 11$