Name_

SYSTEM OF EQUATIONS-ELIMINATION #1

Directions: Solve each system of equations below by *eliminating* a variable from each system. In order to eliminate a variable, you will have to use multiplication or division to modify both equations.

| | | modified equations | | | modified equations | | | modified equations |
|----|-----------------------------------|-------------------------------|----|----------------------------------|--------------------|----|---|--------------------|
| 1) | $5\mathbf{x} + 7\mathbf{y} = 58$ | 15x + 21y = 174 | 2) | $4\mathbf{x} + 9\mathbf{y} = 84$ | | 3) | $\mathbf{6x} + \mathbf{8y} = 62$ | |
| | $\underline{3x+2y=26}$ | $\underline{15x + 10y = 130}$ | | $\underline{3x+5y=49}$ | | | $\underline{5x+3y} = \underline{48}$ | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | x = | y = | | x = | y = | | x = | y = |
| 4) | $8\mathbf{x} + 3\mathbf{y} = 79$ | | 5) | $2\mathbf{x} + 7\mathbf{y} = 54$ | | 6) | 10x + 5y = 60 | |
| | $\underline{9x + 2y = 82}$ | | | $\underline{7x + 3y = 60}$ | | | $4\mathbf{x} + 3\mathbf{y} = 26$ | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | x = | y = | | x = | y = | | x = | y = |
| 7) | $18\mathbf{x} + 24\mathbf{y} = 2$ | 222 | 8) | $3\mathbf{x} + \mathbf{8y} = 12$ | | 9) | $36\mathbf{x} + 54\mathbf{y} = 4$ | 50 |
| | $\underline{12x+10y=1}$ | <u>06</u> | | $\underline{8x + 3y = 32}$ | | | $\underline{30x} + \underline{15y} = 2$ | <u>25</u> |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | x = | y = | | x = | y = | | x = | y = |
| | | | S. | www.imathwo | rksheets.com | | | |