1) Solve the following linear systems using elimination. No multiplying is required here.

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| --- | --- | --- | --- |
| a)$4x-5y=3$ ➀$3x+5y=11$ ➁ | Add/Subtract | b)$5x-y=6$ ➀$2x+y=8$ ➁ | Add/Subtract |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ | Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) | Solution: ( , ) |

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| --- | --- | --- | --- |
| c)$10x+3y=7$ ➀$8x+3y=5$ ➁ | Add/Subtract | d)$5x+4y=18$ ➀$7x+4y=22$ ➁ | Add/Subtract |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ | Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) | Solution: ( , ) |

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| --- | --- | --- | --- |
| e)$2x+5y=20$ ➀$2x+3y=16$ ➁ | Add/Subtract | f)$4x+6y=46$ ➀$-4x+y=3$ ➁ | Add/Subtract |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ | Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) | Solution: ( , ) |

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| --- | --- | --- | --- |
| g)$0.5x-0.3y=0.2$ ➀$0.7x+0.3y=1$ ➁ | Add/Subtract | h)$3x-2y=3.5$ ➀$x+2y=2.5$ ➁ | Add/Subtract |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ | Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) | Solution: ( , ) |

Answers: a) (1, 1) b) (-2, -1) c) (2, 4) d) (-2, 2)

 e) (-1, -3) f) (1, 5) g) (2, 3) h) (-1, 1)

2) Solve the following linear systems by elimination. You will have to multiply one of the equations by a constant.

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| a) Linear System: $x+2y=5$ ➀$5x-3y=-1$ ➁ | Multiply… | New Linear System:  |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

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| --- | --- | --- |
| b) Linear System: $3x+4y=10$ ➀$2x-y=3$ ➁ | Multiply… | New Linear System:  |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |
| c) Linear System: $x+y=9$ ➀$4x+2y=28$ ➁ | Multiply… | New Linear System:  |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

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| --- | --- | --- |
| d) Linear System: $4x+y=6$ ➀$x-6y=14$ ➁ | Multiply… | New Linear System:  |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

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| --- | --- | --- |
| e) Linear System: $5x+y=6$ ➀$2x+7y=9$ ➁ | Multiply… | New Linear System:  |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

|  |  |  |
| --- | --- | --- |
| f) Linear System: $4x+4y=20$ ➀$5x-y=19$ ➁ | Multiply… | New Linear System:  |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

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| --- | --- | --- |
| g) Linear System: $x+5y=1$ ➀$2x+y=11$ ➁ | Multiply… | New Linear System:  |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

Answers: a) (1, 2) b) (2, 1) c) (5, 4) d) (2,-2) e) (1, 1)

 f) (4, 1) g) (6, -1)