1) Solve the following linear systems using elimination. In these questions, Mr. Smith has laid out a clear structure for you to use. In later questions, you will create this structure on your own. ➄ each.

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|  |  |
| --- | --- |
| Linear System: $3x-y=11$ ➀$2x+y=14$ ➁ | Add or Subtract? |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

|  |  |
| --- | --- |
| Linear System: $2x+3y=5$ ➀$2x+y=3$ ➁ | Add or Subtract? |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

|  |  |
| --- | --- |
| Linear System: $3x+4y=10$ ➀$2x+4y=8$ ➁ | Add or Subtract? |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

|  |  |
| --- | --- |
| Linear System: $0.5x-0.2y=2.3$ ➀$1.5x+0.2y=7.7$ ➁ | Add or Subtract? |
| Do the Addition/Subtraction: | Sub into equation ➀ or ➁ |
| Solution: ( , ) |

3) Solve the following linear systems using elimination. For each one, decide if you are going to add or subtract… then do it!! Mr. Smith will take your best 2. ➄ each.

a) b) $3x+7y=16$ ➀ $5x-5y=25$ ➀

 $3x+5y=14$ ➁ $2x+5y=3$ ➁

Add or Subtract? Add or Subtract?

Solution: ( , ) Solution: ( , )

c) d) 8$x-3y=32$ ➀ $5x+2y=12$ ➀

 $5x+3y=20$ ➁ $3x+2y=4$ ➁

Add or Subtract? Add or Subtract?

Solution: ( , ) Solution: ( , )

4) At a hockey game, two of your friends come back with some food:

* Asher has 3 hotdogs, and 2 orders of deep fried pickles. It cost him $19.75.
* Bryden has 1 hotdog, and 2 order of deep fried pickles. It cost him $11.25.

$$3d+2p=19.75$$

$$d+2p=11.25$$

**What is the price of one hotdog? What is the price of one order of deep fried pickles?**



5) At a fundraising car wash, it costs more to wash a van than a car.

* In the morning, 10 cars and 15 vans were washed. They made $325.
* In the afternoon, 12 cars and 15 vans were washed. They made $345.

$$10c+15v=325$$

$$12c+15v=345$$

How much does it cost to wash a car? To wash a van? ➄