

1) Find the solution of the following linear systems. Remember that you will need to determine the slope and y-intercept of each line first.

a)  b) 

Sketch: Sketch:

Point of Intersection: Point of Intersection:

|  |
| --- |
| Am I Right?? Check your answer to part a) |
| Line #1 | Line #2 |
|  |  |

c)  d) 

Point of Intersection: Point of Intersection:

e) $y=\frac{1}{3}x-4$ f) $y=\frac{1}{4}x-3$

 $y=-\frac{1}{2}x+1$ $y=-\frac{3}{8}x+2$

Point of Intersection: Point of Intersection:

Answers: a) (2, 7) b) (-3, -4) c) (2, 3) d) (-3, 1) e) (6, -2) f) (8, -1)

2) Solve the following linear systems using algebra. Mr. Smith has provided a table for you for the first few.

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| --- |
| a) $y=2x-5$ ➀$ y=5x+7$ ➁ |
| 1) Set the equations equal, and solve for “x” | 2) Sub your value for “x” into either equation |
|  |  |
| Point of Intersection = ( , ) |

|  |
| --- |
| b) $y=10x+5$ ➀$ y=8x+17$ ➁ |
| 1) Set the equations equal, and solve for “x” | 2) Sub your value for “x” into either equation |
|  |  |
| Point of Intersection = ( , ) |

|  |
| --- |
| c) $y=0.5x-2$ ➀$ y=1.5x+3$ ➁ |
| 1) Set the equations equal, and solve for “x” | 2) Sub your value for “x” into either equation |
|  |  |
| Point of Intersection = ( , ) |

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| --- |
| d) $y=-3x+25$ ➀$ y=4x+4$ ➁ |
| 1) Set the equations equal, and solve for “x” | 2) Sub your value for “x” into either equation |
|  |  |
| Point of Intersection = ( , ) |

|  |
| --- |
| e) $y=0.1x+2.5$ ➀$ y=0.5x+2.1$ ➁ |
| 1) Set the equations equal, and solve for “x” | 2) Sub your value for “x” into either equation |
|  |  |
| Point of Intersection = ( , ) |

f) $y=\frac{1}{2}x+2$ ➀

$ y=2x-7$ ➁

g) $y=\frac{3}{4}x+1$ ➀ $ $

$ y=3x-8$ ➁

h) $y=0.2x+2.7$ ➀

$ y=0.5x+2.4$ ➁

i) $y=0.12x+0.45$ ➀

$ y=0.25x+0.19$ ➁

Solutions to #2: a) (-4, -13) b) (6, 65) c) (-5, -4.5) d) (3, 16) e) (1, 2.6) f) (6, 5)

 g) (4, 4) h) (1, 2.9) i) (2, 6.9)