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## Relations, Functions, Domain, Range and Linear Function (B) In-Class Assignment

1. Using the set notation, describe the domain and range of each relation. Determine whether the given relation is a function. If the relation has $x$-intercept(s) and y-intercept(s), give their exact coordinates.
a)

|  |  | Domain |  |
| :--- | :--- | :--- | :--- | :--- |
| b) |  | Range |  |

c)

|  |  |  |  | Domain |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. Determine whether the given equation is in:
$>$ A) slope-intercept form
$>$ B) general form
$>$ C) standard form
> D) slope-point form
> E) neither

|  | Equation | Form |  | Equation | Form |
| :--- | :---: | :--- | :--- | :--- | :--- |
| 1 | $y=3 x+1$ |  | 6 | $y-3=0.25(x+8)$ |  |
| 2 | $-2 x+5 y=10$ |  | 7 | $y+3 x-6=0$ |  |
| 3 | $5 x-y=-8$ |  | 8 | $x+2=-4(y-12)$ |  |
| 4 | $y=x+1$ | 9 | $y+10=-5 x$ |  |  |
| 5 | $0.5 x-2 y-8=0$ |  | 10 | $9 x+4 y-20=0$ |  |

3. Rewrite every equation in question 2 in slope-intercept form if it is not already given in that form. Attach a sheet of paper that shows your algebra.

|  | Equation | Slope-Intercept Form |  | Equation | Slop-Intercept Form |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | $y=3 x+1$ |  | 6 | $y-3=0.25(x+8)$ |  |
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## 4. Sketch a graph of each line.

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3.

2.

4.

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6. 


8.

9.

10.


