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## Relations, Functions, Domain, Range and Linear Function 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.

|  |  | Domain |  |
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|  |  | Domain |  |
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2. Graph the given line and state the coordinates of the $y$-intercept, the slope and end behavior (increasing, decreasing, constant slope of zero, or infinite slope - vertical line, not a function).

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| Equation: $y=3 x$ |
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| y-intercept: |
| Slope: |
| End behavior: |




Equation: $y=x-3$
y-intercept:
Slope:

Equation: $y=-x+2$
y-intercept:
Slope:

End behavior:



Equation: $y=\frac{-4}{5} x+1$
y-intercept:
Slope:
End behavior:

Equation: $y=-6$
y-intercept:
Slope:
End behavior:

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Equation: $x=-4$
y-intercept:
Slope:
End behavior:

Equation: $y=\frac{1}{5} x+6$
y-intercept:

Slope:
End behavior:

