## Understand the functional relationships between two linear functions with the same representation.

| Equations | Tables | Graphs | Verbal Description |
| :---: | :---: | :---: | :---: |
| $y=-2 x+4$ |  | $\ldots$ | I had \$4 in my bank account and then deposited $\$ 2$ per week. |
| $y=5 x$ |  |  | I had to purchase supplies to start my bake sale and I spent \$10.I charged $\$ 0.50$ per goody. |
| $y=\frac{1}{2} x-10$ | $X$ $Y 1$ <br> $-z$ -5 <br> -2 -4 <br> -1 -3 <br> 0 -2 <br> 1 0 <br> 2 0 <br> 3 1 |  | The temperature was 4 degrees Fahrenheit and decreased by 2 degrees per hour throughout the day. |
| $y=2 x+4$ | $X$ $Y_{1}$ <br> $-z$ $-z$ <br> -2 0 <br> -1 4 <br> 0 6 <br> 2 1 <br> 3 10 |  | I owed my mom \$2 and then I paid her back \$1 per week. |
| $y=25+.75 x$ | $X$ $Y 1$ <br> -2 10 <br> -2 -1 <br> -1 6 <br> 0 2 <br> 2 $\frac{1}{3}$ <br> 3 -2 |  | I lost \$50 playing cards at the casino. Then I played slots and won $\$ 0.75$ per hour. |


| $y=10 x+150$ | $X$ $Y 1$ <br> -5 -11.5 <br> -2 -11.5 <br> -1 -10.5 <br> 0 -10.5 <br> 1 -9.5 <br> 2 -9. <br> 3 -7.5 |  | I had \$3 in my bank account and deposited $\$ 2$ per week. |
| :---: | :---: | :---: | :---: |
| $y=3+2 x$ | $X$ $Y 1$ <br> -5 -15 <br> -2 -10 <br> -1 -5 <br> 0 0 <br> 1 5 <br> 3 10 |  | I started with nothing and then decreased by half each time. |
| $y=-2+x$ |  |  | The taxi company charged me $\$ 25$ and then $\$ 0.75$ per mile. |
| $y=-\frac{1}{2} x$ | $X$ $Y 1$ <br> $-z$ 120 <br> $-z$ 120 <br> -1 140 <br> 0 150 <br> 1 160 <br> 2 170 <br> 3 180 |  | My babysitting job pays me $\$ 5$ per hour. |
| $y=-50+0.75 x$ |  |  | I found a job that pays me a bonus of $\$ 150$ and then I earn $\$ 10$ per hour. |

