1 Julie started a pet-care business. She bought the necessary supplies for \$85. Julie charges \$25 per weekend for each pet she cares for. Which function represents her net profit in terms of x, for the number of pets she cares for?

y = 25x - 85

| Explain the meaning of -85 |
|--|
| Explain the meaning of 25 |
| Explain the meaning of 25x |
| What vocabulary word defines "-85" |
| What vocabulary word defines "25" |
| How much money would Julie make if she cared for 12 pets? (show your work) |

How many pets would Julie have to care for to make 350 dollars? (show your work)

Make a sketch of the equation on the axis to the right.

Transitioning to linear word problems

Name:_____

2 Bradley the crocodile weighs 23 kilograms. His veterinarian wants him to be on a diet to lose 1.5 kg each month. Which equation represents Bradley's weight after x months?

```
y = -1.5x + 23
```

| Explain the meaning of 23 |
|---|
| Explain the meaning of -1.5 |
| Explain the meaning of -1.5x |
| What vocabulary word defines "23" |
| What vocabulary word defines "-1.5x" |
| How many kg will Bradley weigh after 3 months? (show your work) |

How many months will it take for Bradley to weigh 15 kg? (show your work)

Make a sketch of the equation on the axis to the right.