

"Abs Val Odie"

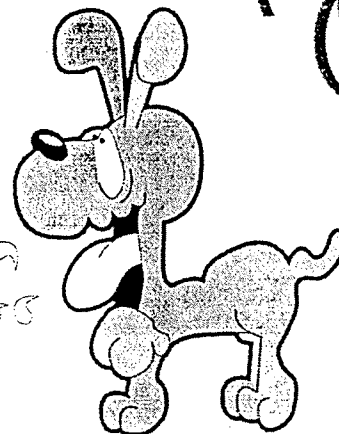
(Sung to the Tune, Yankee Doodle)

Odie is a special dog,

Odie is my hero...

"Absolute value of Odie" means

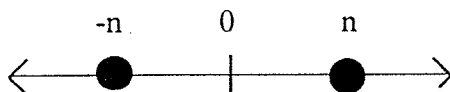
"How far is he from zero?"



"Abs Val Odie" = n

Odie is excited!

Cuz to plus or minus n
Dear Odie's been invited!



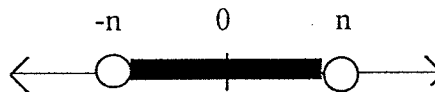
$$| \text{Odie} | = n$$

$$\text{Odie} = n \text{ or } \text{Odie} = -n$$

"Abs Val Odie" < n

Odie's sANDwiched dog run

Spans from minus n to n
Poor Odie's bounded - **NO FUN!**

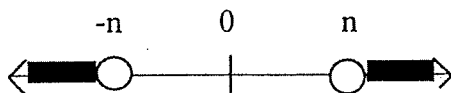


$$| \text{Odie} | < n$$

$$-n < \text{Odie} < n$$

"Abs Val Odie" > n

RAYS of Hope depicted...
Free to roam most anywhere
'Cept 'tween the n 's --
RESTRICTED!



$$| \text{Odie} | > n$$

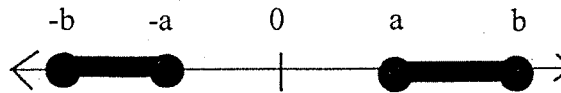
$$\text{Odie} < -n \text{ or } \text{Odie} > n$$

"Abs Val Odie" stuck between

Two numbers - What A Bummer!
(Not so bad...) A dog run's there
For Winter or for Summer!

<0

>0



$$a \leq | \text{Odie} | \leq b$$

$$-b \leq \text{Odie} \leq -a \text{ or } a \leq \text{Odie} \leq b$$