

MasterMath

Solving Inequalities

Name _____

Date _____

1. **Solve these inequalities**

Inequality	Solution
$16x > 32$	
$1/2x + 3 < 19$	
$6 - 2x > 30$	
$z \div (-2) < 6$	
$15y > 60$	
$28 < -2x$	
$66 + 4 > -2c$	
$18x > 54$	
$-2(x + 2) > -6$	
$13z - 5 < 21$	
$7/8x \geq 7/8$	

Inequality	Solution
$-16z > 32$	
$x + 2x \neq 9$	
$85a > 85$	
$-4x < 16$	
$2x > 1/2$	
$39 < -3x$	
$75 - z > 100$	
$9 - 2d \neq 15$	
$45 \leq 3x$	
$45 \leq -3x$	
$-45 < -3x$	

Translate these statements into Inequalities

- You can only keep fish you catch if they are longer than 12"
- To qualify for the Olympics, you need to have a time in the 400 meters that is less than 46.5 seconds.
- In order to ride the Crazy Cat ride at Busch Gardens, you need to be at least 49" tall.
- The local fire code says that this room can have a maximum of 45 people in it.
- Fred's mother will only tell us that she is older than 35.
- To lose weight, you need to eat less than a total of 1700 calories per day.
- Which graph shows the solution to $2 - 2x > 0$?

