## WRITING \& SOLVING INEQUALITIES - Day 1

BELL WORK
Which is NOT a solution of the inequality $10-3 x \geq-8$ ?
A. -2
B. 0
C. 6
D. 10

Use this table to help you write inequalities from word problems.


EXAMPLES: Write an inequality for each situation.

| 1. Two-hundred decreased by twice a number is <br> at least 30. | 2. Six less than 3 times a number is no more <br> than 42. |
| :--- | :--- |
| 3. Three times a number exceeds the sum of the <br> number and 10. | 4. Forty percent of a number is fewer than 18. |

## EXAMPLES: Write an inequality for each situation and solve.

5. You have at most $\$ 60$ to spend on clothing. You need a pair of jeans that cost $\$ 22$, and you can spend the rest on t-shirts that cost $\$ 8$ each. How many shirts can you afford to buy?

Inequality: $\qquad$
6. To rent a certain vehicle, Hertz charges $\$ 55.00$ a day with unlimited miles. The cost of renting a similar vehicle at Avis is $\$ 38.00$ a day plus $\$ 0.20$ per mile. For what number of miles is the cost at Hertz less than the cost at Avis?

Inequality: $\qquad$
7. A sales associate in a shoe store earns $\$ 325$ per week, plus a commission equal to $4 \%$ of her sales. This week her goal is to earn at least $\$ 475$. How many dollars' worth of shoes must she sell to reach her goal?

Inequality:

