11) Question: For the given inequality $10x - 5 \geq 8x - 7$
which of the following choices is NOT the correct solution.

A) -2
B) -1
C) 0
D) 1   *nc,ie*

For speed, *while solving something similar, only THINK the words in blue; WRITE only the words in other COLORS.*

Solution:
Given: 1) $10x - 5 \geq 8x - 7$
Solve: *Find the correct range that   satisfies   the above inequality.*
Find the choice that does NOT   satisfy   the above inequality. That is our correct answer.

Road Map of Solution:
First *Step: Solve the inequality.*
Second *Step: Find the correct range that   satisfies   the above inequality.*
Third *Step: Find the choice that does NOT   satisfy   the above inequality. That is our correct answer.*

$$10x - 5 \qquad \geq \qquad 8x - 7$$
insert explanation; via tooltip?
$$\Rightarrow \quad \{ 10x - 5 \} \quad \boxed{- 8x} \geq \quad \{ 8x - 7 \} \boxed{- 8x}$$

$$\Rightarrow \quad 10x - 5 \quad - 8x \geq \quad 8x - 7 \quad - 8x$$

$$\Rightarrow \quad 2x - 5 \qquad \geq \qquad -7$$
insert explanation
$$\Rightarrow \quad \{ 2x - 5 \} \quad \boxed{+ 5} \geq \quad \{ \quad -7 \} \boxed{+ 5}$$

$$\Rightarrow \quad 2x - 5 \; + 5 \geq \qquad -7 \; + 5$$

$$\Rightarrow \quad 2x \qquad \geq \qquad -2$$
insert explanation
$$\Rightarrow \quad \{ 2x \} \; \boxed{\times \left(\tfrac{1}{2}\right)} \qquad \geq \quad \{ \quad -2 \} \; \boxed{\times \left(\tfrac{1}{2}\right)}$$

$$\Rightarrow \quad 2x \; \times \left(\tfrac{1}{2}\right) \qquad \geq \qquad -2 \; \times \left(\tfrac{1}{2}\right)$$

$$\Rightarrow \quad 1x \; \times \left(\tfrac{1}{1}\right) \qquad \geq \qquad -1 \; \times \left(\tfrac{1}{1}\right)$$

$$\Rightarrow \quad x \; \times (1) \qquad \geq \qquad -1 \; \times (1)$$

$$\Rightarrow \quad x \qquad \geq \qquad -1 \; \ldots\ldots\ldots\ldots\ldots \; \#1$$
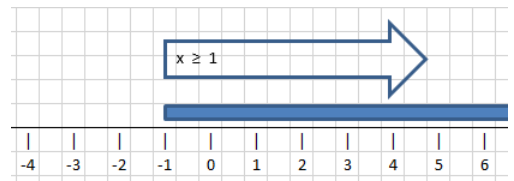
i.e. "x" can   be equal to or greater than -1
i.e. "x" can   have the values,   -1, -0.5, 0, 1, 1.1, 1.2, 1.5, 1.9, 2, and so on . . .

i.e. of the choices give at the top of the page,
"x" can NOT   have the value,   -2 . . . . . .   Answer(A)