| Full Student Name: | $1 / 2 \quad 5 / 6 \quad 7 / 8$ | Date: |  |
| :--- | ---: | ---: | ---: |
| Opening Checklist (15 points) | $/ 5$ |  |  |
| 1. I had my math notes folder and daily papers ON MY DESK by the time class began. | $/ 5$ |  |  |
| 2. I had been using a SHARPENED pencil by the time class began. | $/ 5$ |  |  |
| 3. I had FINISHED copying the objective and had STARTED defining the Word of the <br> Day by the time class began. |  |  |  |

Do Now (10 points) - Copy the Objective and define the Word of the Day.
Obj:
Word of
the Day
\& Defn:

Solve Inequalities with Fractions

| The variable is multiplied by one fraction $\rightarrow$ Multiply by the reciprocal to cancel out the fraction | Ex. 1 | $-\frac{3}{4} w>12$ | You Try 3 | $\frac{8}{9} k \leq 16$ |
| :---: | :---: | :---: | :---: | :---: |
| A whole algebraic expression is being divided $\rightarrow$ Multiply by the denominator to cancel out the denominator | Ex. 2 | $\frac{3 x-4}{2} \leq-5$ | You Try 4 | $\frac{5 x-7}{3} \leq 6$ |

Choose Solutions to Inequalities

| Solve the inequality $\rightarrow$ <br> Choose a solution that <br> makes the statement <br> TRUE | $\frac{\text { Ex. } 5}{\text { a. }-5}$ | $m-8-4 m<-23$ | $\frac{\text { You Try } 6}{\text { a. } 8.5} \quad 4(1-3 k)>-92$ |
| :--- | :--- | :--- | :--- |
|  | b. 5 | b. 8 |  |
|  | c. 6 | c. -8 |  |
|  | d. 4 | d. 9 |  |

## Write \& Solve 2-Step Inequalities

1) Find the inequality key words/phrases and the math operation key words/phases.
2) Write and solve the inequality.
3) Answer the question by rounding based off the inequality symbol.

Ex. 7 Sammy wants to keep no less than $\$ 65$ at the end of the day. Sammy owes Matt $\$ 3$, but he makes $\$ 5$ for every souvenir item he sells. How many souvenirs must Sammy sell? Write and solve an inequality to answer the question.

You Try 8 Joanne is making holiday ornaments. She has already made 45. She gives away 2 ornaments per family member. If she wants to keep at least 10 ornaments for her own decorations, how many family members can she give ornaments to? Write and solve an inequality to answer the question.

