## READY

Topic: Isolate a variable with inverse operations.
Isolate the indicated variable and then fill in the blank for the statement that follows.

1. Solve for $x ; a x=7$
2. Solve for $p ; 8+p=w$
3. Solve for $m ; e=m c^{2}$
4. Solve for $t ; d=r t$
5. Solve for $r ; d=r t$
6. Solve for $h ; 7-h=0$
7. Solve for $b ; b-11=3$
8. Solve for $y ; \frac{1}{2} y=k$
9. Solve for $h ; A=\frac{b h}{2}$
10. Solve for $x ; y=m x+b$

I can find $1 x$ or $x$ by $\qquad$ on both sides of the equation.

I can find $1 p$ or $p$ by $\qquad$ on both sides of the equation.

I can find 1 m or $m$ by $\qquad$ on both sides of the equation.

I can find 1 t or $t$ by $\qquad$ on both sides of the equation.

I can find $r$ by $\qquad$ on both sides of the equation.

I can find $h$ by $\qquad$ on both sides of the equation.

## SET

Topic: Defining and interpreting variables and units of measure.
Jaxon likes to be organized, so he made the following chart. He has decided to keep track of the miles he runs and the time he spends running. He attends P.E. class on Monday, Wednesday, and Friday, but he goes to school everyday. Fill in the Units column on the chart.

| Symbol | Meaning <br> (Description of what the symbol means in context) | Units <br> (What is counted or measured) |
| :---: | :--- | :--- |
| $\boldsymbol{M}$ | Number of miles ran in PE class on Mondays |  |
| $\boldsymbol{W}$ | Number of miles ran PE class on Wednesdays |  |
| $\boldsymbol{F}$ | Number of miles ran PE class on Fridays |  |
| $\boldsymbol{S}$ | Number of miles from Jaxon's house to the school. |  |
| $\boldsymbol{H}$ | Time (in hours) to travel to school |  |
| $\boldsymbol{t}_{\boldsymbol{M}}$ | Time (in minutes) spent running in PE on Monday |  |
| $\boldsymbol{t}_{\boldsymbol{W}}$ | Time (in minutes) spent running in PE on Wednesday |  |
| $\boldsymbol{t}_{\boldsymbol{F}}$ | Time (in minutes) spent running in PE on Friday |  |

Make meaning of the expressions below, write what they each mean!
If an expression does not make sense, say why.
11. $\boldsymbol{M}+\boldsymbol{W}+\boldsymbol{F}$
12. $\mathbf{4}(\mathbf{M}+\boldsymbol{W}+\boldsymbol{F})$
13. $2 S$
14. $\boldsymbol{t}_{\boldsymbol{M}}+\boldsymbol{t}_{\boldsymbol{W}}+\boldsymbol{t}_{\boldsymbol{F}}$
15. $\frac{\boldsymbol{t}_{M}+\boldsymbol{t}_{\boldsymbol{W}}+\boldsymbol{t}_{\boldsymbol{F}}}{3}$
16. $5(2 \mathrm{H})$
17. $M+\boldsymbol{H}$

## Mathematics Vision Project

## GO

Topic: Set notation to interval notation. Inequalities on a number line.
Below you will find the domains of several different functions. The domains are described in either set notation or interval notation. Fill in the missing notation.

| Set Notation | Interval Notation |
| :--- | :--- |
| 18. $\quad\{x \mid x \in \mathbb{R},-\mathbf{2}<\mathbf{x}<\mathbf{6}\}$ |  |
| 19. | $[-4,7]$ |
| $20 . \quad\{\mathbf{x} \mid \mathrm{x} \in \mathbb{R}, x \geq-9\}$ |  |
| 21. | $(0,13]$ |
| $22 . \quad\{\mathbf{x} \mid \mathbf{x} \in \mathbb{R},-\mathbf{1 5} \leq x \leq-8\}$ |  |
| 23. |  |
| 24. |  |

25. Which notation, interval or set, would be most appropriate when working with a domain of whole numbers?

For each of the inequalities provided graph the values being described on the numbers line.

| 26. $\quad x<6$ | $\longleftrightarrow$ |
| :--- | :--- | :--- |
| 27. $x>5$ | $\longleftrightarrow$ |
| 28. $\quad x \geq-9$ | $\longleftrightarrow$ |
| 29. $-7 \leq x<0$ |  |
| 30. $\quad 3 \leq x \leq 25$ | $\longleftrightarrow$ |
| 31. $-15<x \leq 8$ | $\longleftrightarrow$ |

