Multi-Step and Variables on Both Sides Inequality Practice Puzzle

*Solve each of the inequalities below. Put your number solution in the box below each number line, and shade in the appropriate direction. Circle the letter above the arrow that you shaded towards. In the puzzle answer at the bottom of this page, fill in the circled letter into the boxes above your number solution.*

|  |  |  |
| --- | --- | --- |
| 1. - (x – 1) ≤ -3

 K W  | 5 – 2x ≤ 15 F B | 2x – 6 – 4x $\leq $ -8S E |
| 2 – 2(x – 3) $\geq $ 8I P | 5x + 15 - 6x > 19T R | $\frac{x}{3}-5\leq $ -2 M T |
| -3(3x + 1) $\geq $ -5(2x – 1) R A | E H | $$-7+ \frac{-x}{2} \geq -4$$S T |
| 10 - 3x + (-19) > 9 + 6x G N | -10 – 7x + 9x ≤ 8 - 4xO A | 3(x – 6) $\geq $ -18 – 5xT Y |

*Which weighs more?  A pound of gold or a pound of feathers?*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| x$<$-4 | x$\geq $18 | x$\geq $1 | x$\geq $0 |  | x$\geq $-5 | x$\leq $3 | x$<$-4 | x$\geq $18 |  | x$\geq $6 | x$\geq $1 | x$\leq $0 | x$<$-2 | x$\geq $18 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | !! |  |  |  |  |  |  |
| x$<$-4 | x$\geq $18 | x$\geq $1 |  | x$\leq $-6 | x$\geq 8$ | x$\leq $9 | x$\geq $1 |  |  |  |  |  |  |  |

Created by Erin Duffy 2012