## "GREATER THAN, LESS THAN, OR EQUAL TO" WARM-UP

You need four index cards (or two, if they are cut in half) for each student. Each student needs to label theirs as shown:


The teacher, using the overhead, whiteboard, SmartBoard or document camera, makes a mini-table as shown:

| $A$ | $B$ |
| :---: | :---: |
| 12 | 8 |

WHOLE GROUP: Students compare $A$ and $B$. They hold up the $A$ card, if that number is greater than $B$. They hold up the $B$ card, if that number is greater than $A$. They hold up the $=$ card, if $A$ is equal to $B$. They hold up the ?? card if it can't be determined which is greater. The teacher scans the class to check the student results. Discussion occurs, as needed.

SMALL GROUP: Students sit in groups of 3, 4, or 5. Each student places the card with A, B, =, ?? face down in front of him/herself. When the teacher says "turn over", they reveal their card to the small group and discussion occurs in the small group, as needed, followed up by whole group discussion.

To the teacher: Select numbers that are appropriate for the grade/course you teach. Sample numbers for A and B are shown in the table.

| A | B | A | B |  |
| :---: | :---: | :---: | :---: | :---: |
| 12 | 8 | X | $\mathrm{X}+1$ |  |
| $\frac{2}{3}$ | $\frac{5}{6}$ | X | -X |  |
| -7 | 2 | X | 3 X |  |
| -6 | -4 |  | X | $\mathrm{X}^{2}$ |
| $3 / 4$ | 0.75 |  |  |  |
| 2.146 | 2.15 |  |  |  |
| $0.333 \ldots$ | $1 / 3$ |  |  |  |
| $\sqrt{3}$ | 2 |  |  |  |
|  |  |  |  |  |

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On the next page, there are two sets of cards that can be photocopied on card stock which may be cheaper for you to use than index cards.

| A | B |
| :---: | :---: |
| $=$ | $? ?$ |
| A | B |
| $=? ?$ |  |

