**When Do We Flip It?**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1a. Start with this table. Fill in the appropriate  symbol (< or >) between Columns A and B.   |  |  |  | | --- | --- | --- | | **20 No.** | **Symbol** | **B** | | 3 | < | 5 | | –7 |  | 4 | | 0 |  | 8 | | 6 |  | 3 |   2a. Start with this table. Fill in the appropriate  symbol (< or >) between Columns A and B.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | | 3 | < | 5 | | –7 |  | 4 | | 0 |  | 8 | | 6 |  | 3 | | 1b. **Add** 4 to BOTH columns and complete the  table with the correct inequality symbol.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | |  | < |  | |  |  |  | |  |  |  | |  |  |  |   2b. **Add** -4 to BOTH columns and complete the  table with the correct inequality symbol.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | |  | < |  | |  |  |  | |  |  |  | |  |  |  | |

3. Does **adding** a positive or negative number change the inequality symbol? Explain.

4. Solve the inequality and graph the solution:

8



|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5a. Start with this table. Fill in the appropriate  symbol (< or >) between Columns A and B.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | | 3 | < | 5 | | –7 |  | 4 | | 0 |  | 8 | | 6 |  | 3 |   6a. Start with this table. Fill in the appropriate  symbol (< or >) between Columns A and B.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | | 3 | < | 5 | | –7 |  | 4 | | 0 |  | 8 | | 6 |  | 3 | | 5b. **Divide** BOTH columns by 2 and complete the  table with the correct inequality symbol.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | | 3 / 2 = 1.5 | < | 5 / 2 = 2.5 | |  |  |  | |  |  |  | |  |  |  |   6b. **Divide** BOTH columns by –2 and complete  the table with the correct inequality symbol.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | | 3 / (-2) = -1.5 | > | 5 / (-2) = -2.5 | |  |  |  | |  |  |  | |  |  |  | |

7. Does **dividing** by a positive or negative number change the inequality symbol? Explain.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8a. Start with this table. Fill in the appropriate  symbol (< or >) between Columns A and B.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | | 3 | < | 5 | | –7 |  | 4 | | 0 |  | 8 | | 6 |  | 3 |   9a. Start with this table. Fill in the appropriate  symbol (< or >) between Columns A and B.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | | 3 | < | 5 | | –7 |  | 4 | | 0 |  | 8 | | 6 |  | 3 | | 8b. **Multiply** BOTH columns by 3 and complete  the table with the correct inequality symbol.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | |  | < |  | |  |  |  | |  |  |  | |  |  |  |   9b. **Multiply** BOTH columns by –3 and complete  the table with the correct inequality symbol.   |  |  |  | | --- | --- | --- | | **A** | **Symbol** | **B** | |  | > |  | |  |  |  | |  |  |  | |  |  |  | |

1. Does **multiplying** by a positive or negative number change the inequality symbol? Explain.
2. Solve the inequality and graph the solution. **Remember**, if you multiply or divide both sides of the inequality by a negative number, reverse (flip) the inequality symbol.

  



