

7.5b

Graphing Inequalities

NAME _____

Date _____ Period _____

Remember

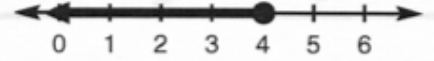
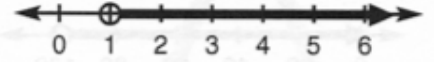
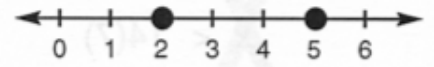
- The arrowhead always points to the smaller value.
- When graphing a linear inequality on a number line, use . . .
an open dot for $<$ or $>$.
a solid dot for \leq or \geq .

$$6 - 4 < 5$$

$$5 > 6 - 4$$

$$n > 1$$

$$n \leq 4$$



**No Graph =
No Credit!**

Draw straight lines to match the descriptions and inequalities. Then graph the inequality on the corresponding number line. The uncrossed letters will spell out a message.



- | | | | |
|--|----------|--------------------|--|
| 1. Six is greater than three. ● | G | ● $6 < 10$ | |
| 2. Three is less than five. ● | M | ● $10 < 3 \cdot 5$ | |
| 3. Six is less than ten. ● | A | ● $6 > 3$ | |
| 4. Ten is less than three times five. ● | T | ● $20 > 15$ | |
| 5. Ten is greater than five minus five. ● | R | ● $3 < 5$ | |
| 6. Twenty is greater than fifteen. ● | E | ● $10 > 5 - 5$ | |
| 7. A number is less than or equal to five. ● | H | ● $n \geq 8 + 2$ | |
| 8. A number is greater than three. ● | T | ● $n > 3$ | |
| 9. A number is greater than or equal to eight plus two. ● | J | ● $n \leq 3 + 5$ | |
| 10. A number is less than the product of five and two. ● | R | ● $n \leq 5$ | |
| 11. A number is less than or equal to the sum of three and five. ● | U | ● $n > 5 \cdot 2$ | |
| 12. A number is greater than five times two. ● | O | ● $n < 5 \cdot 2$ | |
| | L | | |
| | E | | |
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| | ! | | |