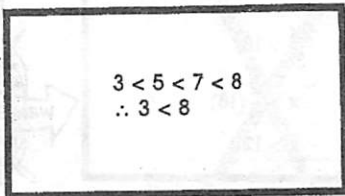
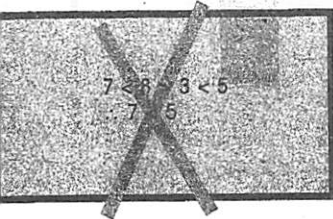


## Writing Inequalities

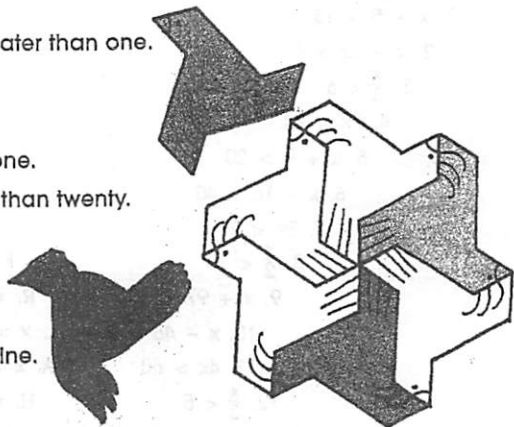


### Remember

- The arrow always points to the smaller number.
- In any inequality, all arrows should point in the same direction.

Find the Inequality that matches each sentence. Shade the answers to find a familiar mathematical symbol.

1. The square root of twenty-five is greater than one.
2. Seven is greater than four.
3. Four plus three is less than nine.
4. Eight divided by two is more than one.
5. The product of two and nine is less than twenty.
6. Six is less than twelve.
7. Thirteen is greater than five.
8. Twelve is less than fourteen.
9. Nineteen is greater than five plus nine.
10. Seven is less than ten.



$8 + 1 > 9$	$19 < 5 + 10$	$10 < 20$	$100 > 5$
$4 > 7$	$7 < 10$	$12 < 14$	$2(9) < 20$
$25 > 1$	$7 > 4$	$\sqrt{25} > 1$	$5 > 3$
$5 > 1$	$6 < 2$	$5 < 10$	$9 > 20$
$7 > 1$	$8 \div 2 > 1$	$19 < 5 + 9$	$6 < 3$
$7 < 10$	$6 < 12$	$4 + 3 < 9$	$16 > 40$
$9 + 2 < 20$	$13 > 5$	$8 > 0$	$13 < 5$
$24 > 6$	$8 < 9$	$6 < 9$	$8 \div 2 > 1$
		$8 < 3$	$6 > 12$
		$1 < 0$	$19 > 20$

## Solving Inequalities.

~~$$x > 15$$

$$x < (18)$$

$$x > 12$$~~



$$\frac{2x}{3} > 18$$

$$\frac{3}{2} \cdot \frac{2x}{3} > \frac{3}{2} \cdot \frac{18}{1}$$

$$x > 27$$

**Remember**

Always CHECK your answers to make sure they make sense.

Solve each inequality in the "greater than" sign and find the answer in the "less than" sign. Use the code to find the name of the magic hexagon—named for the mathematician who invented it.

- |                       |              |
|-----------------------|--------------|
| 1. $x + 5 > 13$       | I. $x < 18$  |
| 2. $x - 13 > 4$       | O. $x > 56$  |
| 3. $\frac{x}{3} < 6$  | A. $x < 3$   |
| 4. $7x < 14$          | F. $x > 11$  |
| 5. $x + 9 > 20$       | D. $x < 36$  |
| 6. $x - 16 > 40$      | C. $x > 8$   |
| 7. $3x < 27$          | D. $x > 48$  |
| 8. $\frac{x}{2} < 18$ | F. $x < 2$   |
| 9. $x + 97 < 100$     | R. $x < 9$   |
| 10. $x - 46 > 2$      | L. $x > 17$  |
| 11. $4x > 60$         | A. $x > 15$  |
| 12. $\frac{x}{3} < 5$ | H. $x < 22$  |
| 13. $x - 14 > 2$      | X. $x < 4$   |
| 14. $x + 78 < 100$    | G. $x < 100$ |
| 15. $\frac{x}{7} > 9$ | M. $x < 15$  |
| 16. $7x < 28$         | A. $x > 1$   |
| 17. $x + 19 > 20$     | O. $x > 19$  |
| 18. $x - 40 < 60$     | N. $x < 24$  |
| 19. $5x > 95$         | S. $x > 16$  |
| 20. $\frac{x}{6} < 4$ | E. $x > 63$  |