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COMBINING QUALITIES

TABLE-SELECTION GAME

Select one correct answer for each of the questions in the test and press the Finish button at the end. The answers will be validated automatically.



For each of the given equations and inequalities, where x is a positive integer, choose the correct solution set. (Don't use a calculator.)

1. $\binom{9}{5} = \binom{9}{x}$ ☐ ☐ ☐ ☐ ☐

2. $(x+1)! < 6x!$ ☐ ☐ ☐ ☐ ☐

3. $\binom{3}{3} + \binom{3}{2} + \binom{3}{1} = 9x$ ☐ ☐ ☐ ☐ ☐

4. $\binom{x+1}{x-1} \leq 15$ ☐ ☐ ☐ ☐ ☐

5. $7x! - 6 = (x!)^2$ ☐ ☐ ☐ ☐ ☐

6. $5 - \binom{x}{2} \geq \binom{x+2}{x+1}$ ☐ ☐ ☐ ☐ ☐

7. $4 \frac{x!}{(x-2)!} - 2x = 3 \binom{x+1}{2}$ ☐ ☐ ☐ ☐ ☐

8. $3 \binom{x+1}{2} - x > 2 \frac{x!}{(x-2)!}$ ☐ ☐ ☐ ☐ ☐

