Match each relation to its inverse then describe the domain and range of both functions. Name: ______

| Relation | Matching Inverse | Domain of Relation | Range of Relation | Domain of Inverse | Range of Inverse |
|----------|------------------|--------------------|-------------------|-------------------|------------------|
| А | | | | | |
| В | | | | | |
| С | | | | | |
| D | | | | | |
| E | | | | | |
| F | | | | | |

| A. x Y -2 13 3 15 5 17 8 21 12 32 | B. | C. | D. |
|---|---|----|---|
| E. | F. x Y -13 2 -15 -3 -17 -5 -21 -8 -32 -12 | G. | H. x Y 2 -13 -3 -15 -5 -17 -8 -21 -12 -32 |
| | J. | K. | L. X Y 13 -2 15 3 17 5 21 8 32 12 |

Solve for x, in the following problems. Then complete the statement by identifying the operation you used to "undo" the equation.

| Equation | Undo Statement |
|--------------------------|--|
| 1. $24 = 3x$ | To undo the multiplication by 3, I would |
| 2. $\frac{x}{5} = -2$ | To undo the division by 5, I would |
| 3. $x + 17 = 20$ | To undo the addition of 17, I would |
| 4. $\sqrt{x} = 6$ | To undo the square root of x, I would |
| 5. $\sqrt[3]{(x+1)} = 2$ | To undo the cube root of (x+1), I would |
| | Afterwards, I would undo by |
| 6. $x^4 = 81$ | To undo the fourth power of x, I would |
| 7. $(x-9)^2 = 49$ | To undo the squaring of (x-9), I would |
| | Afterwards, I would undo by |
| | · |