Name: _____ Date: _____

Read each line of working and choose the answer that is correct.

1 Mia wrote $(x^2 - 81) \div (x - 9) - x = x + 9$. Which is correct?

-2x + 9 | x + 9 | **9** | $x^2 - x - 9$

Why? the x was never taken away at the end.

2 Theo says $x/4 + x/7$ comes to $11x/28$. Which is correct?

$x/11$ | $11x/28$ | $2x/11$ | $x^2/28$

Why? _____

3 Check this line: $(x^2 - 36) \div (x - 6) - x = 6$. Which is correct?

-2x + 6 | 6 | x + 6 | $x^2 - x - 6$

Why? _____

4 Ana's answer to $x/3 + x/8$ is $x/11$. Which is correct?

$x/11$ | $x^2/24$ | $11x/24$ | $2x/11$

Why? _____

Algebra reasoning · Algebraic fractions — Answer key

1. $(x^2 - 81) \div (x - 9) - x = 9$, not $x + 9$ (the x was never taken away at the end)

2. $x/4 + x/7 = 11x/28$, which is what was written — this line is correct

3. $(x^2 - 36) \div (x - 6) - x = 6$, which is what was written — this line is correct

4. $x/3 + x/8 = 11x/24$, not $x/11$ (the denominators were added instead of made common)