

Try This 2 – 8 Possible Solutions

TT 2. The following is how the student's completed table should look.

Binomial Squared	Expansion	Apply Distributive Property/Algebra Tiles	Product (Perfect Square Trinomial)
$(x+1)^2$	$(x + 1) (x + 1)$	$x^2 + 1x + 1x + 1$	$x^2 + 2x + 1$
$(x+3)^2$	$(x + 3) (x + 3)$	$x^2 + 3x + 3x + 9$	$x^2 + 6x + 9$
$(x - 4)^2$	$(x - 4) (x - 4)$	$x^2 - 4x - 4x + 16$	$x^2 - 8x + 16$
$(2x+5)^2$	$(2x + 5) (2x + 5)$	$4x^2 + 10x + 10x + 25$	$4x^2 + 20x + 25$
$(3x - 2)^2$	$(3x - 2) (3x - 2)$	$9x^2 - 6x - 6x + 4$	$9x^2 - 12x + 4$
$(a + b)^2$	$(a + b) (a + b)$	$a^2 + ab + ab + b^2$	$a^2 + 2ab + b^2$

TT 3. Square the first term in the binomial.

TT 4. Square the last term in the binomial.

TT 5. Multiply the product of the two terms in the binomial by 2.

TT 6. The following is a rule that the student could write.

- Square root the first term of the trinomial to get the first term of the binomial.
- Square root the last term of the trinomial to get the last term of the binomial.
- Write the binomial squared.
- Check by expanding.

TT 7. A perfect square trinomial has perfect squares for its first term and last term. The middle term is double the product of the square roots of the first and last terms.

TT8: Answers will vary.

One possible answer is:

$25x^2 + 10x + 1$ is a perfect square as it factors to be $(5x + 1) (5x + 1)$ or $(5x+1)^2$.

This is a perfect square as it fits the pattern of squaring the first term, squaring the last term and then finding the middle term by multiplying the two terms in the binomial by 2.