**Äquivalente Gleichungen IV**

**Löse folgende Gleichungen durch Äquivalenzumformung.**

**Scheibe die Lösungsmenge.**

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| 1. (x - 9)(x + 8) = x(x + 3) - 60 │ Tx² - 9x + 8x - 72) = x² + 3x - 60 │ T x² - x – 72 = x² + 3x - 60 │ T - x – 72 = 3x - 60 │- x² - x – 72 = 3x + 12 │+72 - x = 3x + 12 │-3x -4x = 12 │:(-25) x = -3 **L = { -3 }** |
| 2. -7(x + 3)(x + 1) = 251 + x(-7x + 6) │ T -7(x² + 3x + x + 3) = 251 - 7x² + 6x │ T -7(x² + 4x + 3) = 251 - 7x² + 6x │ T -7x² - 28x - 21 = 251 - 7x² + 6x │+7x² - 28x - 21 = 251 + 6x │-6x - 34x - 21 = 251 │+21 -34x = 272 │:60 x = -8 **L = { -8 }** |
| 3. 3(x - 5)(x - 1) = x(3x + 1) - 4 │ T 3(x² - 5x - x + 5) = 3x² + x - 4 │ T 3(x² - 6x + 5) = 3x² + x - 4 │ T 3x² - 18x + 15 = 3x² + x - 4 │-3x² - 18x + 15 = x - 4 │-15 -18x = x - 19 │-x -19x = -19 │:(-19) x = 1 **L = { 1 }**  |