**Äquivalente Gleichungen IV**

**Löse folgende Gleichungen durch Äquivalenzumformung.**

**Scheibe die Lösungsmenge.**

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| 1. (x - 9)(x + 8) = x(x + 3) - 60 │ T  x² - 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 }** |