**Faktorisieren bei binomischen Formeln**

1. Binomische Formel

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| a² + 2a + 1 = (a + 1)(a + 1) = (a + 1)²  Summe Produkt  9a² + 12a + 4 = (3a + 2) (3a + 2) = (3a + 2)² |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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2. Binomische Formel

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| a² – 2a + 1 = (a – 1)(a – 1) = (a – 1)²  Summe Produkt  16a² – 24a + 9 = (4a – 3) (4a – 3) = (4a – 3)² |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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3. Binomische Formel

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| a² – b² = (a – b)(a + b)  Summe Produkt  9a² – 16 = (3a – 4) (3a + 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Faktorisieren in zwei Schritten

300a² + 60a + 3 = 3(100a2 + 20a + 1) = 3 (10a + 1)(10a + 1) = 3 (10a + 1)²

Summe Ausklammern Produkt

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**Spiel: Punkte sammeln**

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| Ein Bild, das Zeichnung, Licht enthält.  Automatisch generierte Beschreibung | Spielanleitung:   * Sie spielen gegen Ihren Mitspieler. * Sie benötigen ein zusätzliches Papier zum Schreiben. * Ein Tablet liegt in der Mitte und mit diesem wird der nachfolgende QR-Code gescannt. * Sie und Ihr Mitspieler übernehmen jeweils die binomische Formel, die dort dargestellt wird, auf Ihr Blatt und faktorisieren diese für sich. * Sobald Sie beide fertig sind, klicken Sie auf die Kästchen und lassen sich die richtige Lösung anzeigen. * Für jeden richtig gelösten Teil (also jedes richtige Kästchen) erhalten Sie einen Punkt, welchen Sie sich hier eintragen. * Danach drücken Sie auf „neu“ und das Punkte Sammeln startet mit einer weiteren Aufgabe. * Wer als erstes 10 Punkte hat, hat dieses Spiel gewonnen. * Starten Sie anschließend eine neue Runde mit dem zweiten QR-Code. Es gelten die gleichen Regeln wie beim ersten Punkte sammeln. |

Punkte sammeln: 1./2. Binomische Formel

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|  | Meine Punkte: |

Punkte sammeln: Faktorisieren in zwei Schritten

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|  | Meine Punkte: |