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| Ein Bild, das Zeichnung, Licht enthält.  Automatisch generierte Beschreibung | 1. Öffnen Sie das eBook (07-5-2\_WM02\_eBook\_ibooks).  2. Lesen Sie sich dieses durch.  3. Bearbeiten Sie die Aufgaben im eBook und folgen Sie dort den Anweisungen. |

Ein Bild, das Screenshot enthält.

Automatisch generierte Beschreibung

1. Möglichkeit = 2. Möglichkeit = 3. Möglichkeit

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| (a + b)c + (a + b)d (a + b)(c + d) ac + ad + bc + bd |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Zwei Summen werden miteinander multipliziert, indem man jeden Summanden der ersten Klammer mit jedem Summanden der zweiten Klammer multipliziert.

Merke

**Stufe 1**

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| Ein Bild, das Zeichnung, Licht enthält.  Automatisch generierte Beschreibung | Bearbeiten Sie alle 5 Aufgaben schriftlichEin Bild, das Hemd enthält.  Automatisch generierte Beschreibung.  Multiplizieren Sie die Klammern jeweils aus.  Die Lösungen hängen im Klassenraum aus. |

**Aufgabe 1**

(x + y)(a + b) =

ax + bx + ay + by

**Aufgabe 2**

(f + e)(4 + m) =

4f + fm + 4e + em

**Aufgabe 3**

(2 + x)(3 + y) =

6 + 2y + 3x + xy

**Aufgabe 4**

(a + 1)(2 + b) =

2a + ab + 2 + b

**Aufgabe 5**

(x + 3)(y + z) =

xy + xz + 3y + 3z

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**Stufe 2**

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| Ein Bild, das Zeichnung, Licht enthält.  Automatisch generierte Beschreibung | Ein Bild, das Hemd enthält.  Automatisch generierte BeschreibungBearbeiten Sie alle 5 Aufgaben schriftlich.  Multiplizieren Sie die Klammern jeweils aus.  Die Lösungen hängen im Klassenraum aus. |

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|  |  |  |  |  |  |  | **Aufgabe 1**  (a – 3)(b + 2) =  ab + 2a – 3b – 6  **Aufgabe 2**  (x + 4)(–3 + y) =  – 3x + xy – 12 + 4y  **Aufgabe 3**  (–a + b)(c – d) =  – ac + ad + bc – bd  **Aufgabe 4**  (5 – e)(5 – f) =  25 – 5f – 5e + ef  **Aufgabe 5**  (–x + y)(–2 – z) =  2x + xz – 2y – yz |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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**Stufe 3**

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| Ein Bild, das Zeichnung, Licht enthält.  Automatisch generierte Beschreibung | Ein Bild, das Hemd enthält.  Automatisch generierte BeschreibungBearbeiten Sie alle 5 Aufgaben schriftlich.  Multiplizieren Sie die Klammern jeweils aus **und**  fassen Sie anschließend so weit wie möglich zusammen.  Die Lösungen hängen im Klassenraum aus. |

**Aufgabe 1**

(3a – 2)(4a + 3) =

12a2 + 9a – 8a – 6 = 12a2 + a – 6

**Aufgabe 2**

(4z + 3y)(4z – y) =

16z2 – 4yz + 12yz – 3y2 = 16z2 + 8yz – 3y2

**Aufgabe 3**

(v + 3)(v2 + 4) =

v3 + 4v + 3v2 + 12

**Aufgabe 4**

(x + x2)(x2 – 3x) =

x3 – 3x2 + x4 – 3x3 = x4 – 2x3 – 3x2

**Aufgabe 5**

(– 2a2 + b)(b2 – 4a2) =

– 2a2b2 + 8a4 + b3 – 4a2b

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