**Addition und Subtraktion von Termen mit Variablen**

![Ein Bild, das Uhr, Raum enthält.

Automatisch generierte Beschreibung]()

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| Ein Bild, das Zeichnung, Licht enthält.  Automatisch generierte Beschreibung | 1. Schauen Sie das erste Video an und folgen Sie den Anweisungen. 2. SendenÜbertragen Sie auf dieses Arbeitsblatt nach Aufforderung im Video die Regeln. 3. Bearbeiten Sie die anschließende Aufgabe. |

**Regeln:**

**Beispiel:**

5a – (– 4a) = 5a + 4a = 9a

**Aufgabe:** Fassen Sie zusammen.

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**Merke:**

**Beispiel:**

6x – (–8y) + 11x = 6x + 8y + 11x = 6x + 11x + 8y = 17x + 8y

– 3x – (+2y) – 9x + (– 3x) – (7y) =

**Aufgabe:** Sortieren Sie zuerst und fassen Sie dann zusammen.

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**Merke:**

**Beispiel:**

*Hauptnenner: 14*

**Aufgabe:** Suchen Sie den Hauptnenner und vereinfachen Sie dann den Term.

Hauptnenner:

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**Merke:**

**Beispiel:**

*Hauptnenner: 12*

**Aufgabe:** Fassen Sie dann den Term so weit wie möglich zusammen.

Hauptnenner:

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**Auflösen von Klammern**

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| Ein Bild, das Zeichnung, Licht enthält.  Automatisch generierte Beschreibung | 1. Schauen Sie das zweite Video an und folgen Sie den Anweisungen. 2. SendenÜbertragen Sie auf dieses Arbeitsblatt nach Aufforderung im Video die Regeln. 3. Bearbeiten Sie die anschließende Aufgabe. |

![Ein Bild, das Uhr, Schild enthält.

Automatisch generierte Beschreibung]()

**Merke:**

**Beispiel:**

(3x – 6y) – (2x – 5y) = 3x – 6y – 2x + 5y = 3x – 2x – 6y + 5y = 1x – 1y

**Aufgabe:** Lösen Sie die Klammern auf und fassen Sie zusammen.

– (– 2a – 3b) + (4a – 7b) =

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**Merke:**

**Beispiel:**

[a – ( b + 2c) ] – [– ( 5a + 3b – c ) + 2a] = [a – b – 2c ] – [– 5a – 3b + c + 2a]

= a – b – 2c + 5a + 3b – c – 2a

= a + 5a – 2a – b + 3b – 2c – c = 6a + 2b – 3c

**Aufgabe:** Lösen Sie die Klammern auf und fassen Sie zusammen.

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**Multiplikation von Summen**

a ( b + c ) = ab + ac

**Merke:**

**Beispiel:**

(2a – 4b) (– 5) = 2a (– 5) – 4b (– 5) = – 10a + 20b

**Aufgabe:** Multiplizieren Sie aus und fassen Sie soweit wie möglich zusammen.

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Werden Sie zum Helfer