

Vereinfache die Terme.

$$1. 13e - (3f - 9e) = 13e - 3f + 9e = 22e - 3f$$

$$2. 4k + 6k = 10k$$

$$3. (5m)^2 = 5m \cdot 5m = 25m^2$$

$$4. 8m + 9n = 8m + 9n \text{ (unverträgliche Monome!)}$$

$$5. 2a(4b - b) = 2a \cdot 3b = 6ab$$

$$6. 20uvw : (5v \cdot 2w) = 20uvw : 5v : 2w = 4uw : 2w = 2u$$

$$7. 1 \cdot c = c$$

$$8. (21x + 49y) : 7 = 21x : 7 + 49y : 7 = 3x + 7y$$

$$9. 25z : 5 = 5z$$

$$10. 25vw : 5v = 5w$$

$$\begin{aligned} 11. 17ax - (20ay + 2a(4x - 5y)) &= 17ax - (20ay + 8ax - 10ay) \\ &= 17ax - (10ay + 8ax) \\ &= 17ax - 10ay - 8ax \\ &= 9ax - 10ay \end{aligned}$$

$$12. 35t : 7t = 5$$

$$13. ef + 3ef - 3ef = ef$$

$$14. 5g(5h + 5k - 9) = 25gh + 25gk - 45g$$

$$15. (byz)^4 = b^4y^4z^4$$

$$16. 6ef^2 + 9e^2f + 9f^2e = 15ef^2 + 9e^2f$$

$$17. 5ax \cdot 4xy = 20ax^2y$$

$$18. p - q = p - q \text{ (unverträgliche Monome!)}$$

$$19. 12abc : (4b : 3c) = 12abc : 4b \cdot 3c = 3ac \cdot 3c = 9ac^2$$

20. $95a + (243b - 242b) = 95a + b$
21. $3g + 9h + 3g - 4h = 6g + 5h$
22. $20x - (2x + 6y) = 20x - 2x - 6y = 18x - 6y$
23. $7p \cdot 7q = 49pq$
24. $3vw + 9wv = 12vw$
25. $4pq \cdot 5qr \cdot 5rs = 100pq^2r^2s$
26. $33a + 18b - 4(7a + 3b) = 33a + 18b - 28a - 12b = 5a + 6b$
27. $5w + w = 6w$
28. $13x + (3y - x) = 13x + 3y - x = 12x + 3y$
29. $(16ab - 16bc) : 4b = 16ab : 4b - 16bc : 4b = 4a - 4c$
30. $2(9p - q) = 18p - 2q$
31. $0 \cdot b = 0$
32. $17v - v = 16v$
33. $13f : f = 13$
34. $10y - 8y = 2y$
35. $9 \cdot 8vw = 72vw$
36. $9a \cdot (4b : 3a) = 9a \cdot 4b : 3a = 9a : 3a \cdot 4b = 3 \cdot 4b = 12b$
37. $8v + 6 + 7v - 3 = 15v + 3$
38. $81c + (287c - 286c) = 81c + c = 82c$
39. $9q^5 \cdot 4q^3 = 36q^8$
40. $3 \cdot p \cdot q = 3pq$