

Terme**Lösungen****Prüfungsvorbereitung (4)**

Vereinfache die Terme.

1. $5p(8q - 3q) = 5p \cdot 5q = 25pq$

2. $2ax \cdot 2xy = 4ax^2y$

3. $2g + 6h + 7g - 9h = 9g - 3h$

4. $78x + (297x - 296x) = 78x + x = 79x$

5. $2(6t - u) = 12t - 2u$

6. $4ef \cdot 5fg \cdot 4gh = 80ef^2g^2h$

7. $3mn + 4mn - 4mn = 3mn$

8. $4p + 3 + 5p - 5 = 9p - 2$

9. $0 \cdot h = 0$

10. $14h - 2h = 12h$

11. $15stu : (5t : 4u) = 15stu : 5t \cdot 4u = 3su \cdot 4u = 12su^2$

12. $3q + q = 4q$

13. $(3n)^2 = 3n \cdot 3n = 9n^2$

14. $9c + 4c = 13c$

15. $(24g + 42h) : 6 = 24g : 6 + 42h : 6 = 4g + 7h$

16. $35vw : 7v = 5w$

17. $4m^4 \cdot 5m^2 = 20m^6$

18. $12a + (6b - 8a) = 12a + 6b - 8a = 4a + 6b$

19. $6r : 3 = 2r$

20. $m - 5n = m - 5n$ (unverträgliche Monome!)

21. $20r : 4r = 5$

$$22. 1 \cdot m = m$$

$$23. (pqr)^3 = p^3q^3r^3$$

$$24. 4d(6e + 6f - 6) = 24de + 24df - 24d$$

$$25. 16f - f = 15f$$

$$26. 20p - (7q - p) = 20p - 7q + p = 21p - 7q$$

$$27. 17k : k = 17$$

$$28. (9de - 12ef) : 3e = 9de : 3e - 12ef : 3e = 3d - 4f$$

$$29. 5 \cdot 8rs = 40rs$$

$$30. vw^2 + 5v^2w + 5w^2v = 6vw^2 + 5v^2w$$

$$31. 2g + 5h = 2g + 5h \text{ (unverträgliche Monome!)}$$

$$32. 3 \cdot r \cdot s = 3rs$$

$$33. 48pqr : (2q \cdot 4r) = 48pqr : 2q : 4r = 24pr : 4r = 6p$$

$$\begin{aligned} 34. 17pq - (13pr + 4p(2q - 2r)) &= 17pq - (13pr + 8pq - 8pr) \\ &= 17pq - (5pr + 8pq) \\ &= 17pq - 5pr - 8pq \\ &= 9pq - 5pr \end{aligned}$$

$$35. 10m - (6m + 3n) = 10m - 6m - 3n = 4m - 3n$$

$$36. 6t \cdot 8u = 48tu$$

$$37. 30e + 17f - 3(7e + 3f) = 30e + 17f - 21e - 9f = 9e + 8f$$

$$38. 12r \cdot (4s : 4r) = 12r \cdot 4s : 4r = 12r : 4r \cdot 4s = 3 \cdot 4s = 12s$$

$$39. 2mn + 9nm = 11mn$$

$$40. 97p + (230q - 227q) = 97p + 3q$$