

**Terme****Lösungen****Prüfungsvorbereitung (2)**

Vereinfache die Terme.

1.  $8a - 5a = 3a$

2.  $77v + (201w - 198w) = 77v + 3w$

3.  $18v + (5w - 13v) = 18v + 5w - 13v = 5v + 5w$

4.  $30ab : 5a = 6b$

5.  $15t - (14t + 7u) = 15t - 14t - 7u = t - 7u$

6.  $1 \cdot w = w$

7.  $9g + g = 10g$

8.  $8 \cdot 3ef = 24ef$

9.  $28q : 4q = 7$

10.  $18a + 30b - 4(4a + 5b) = 18a + 30b - 16a - 20b = 2a + 10b$

11.  $4g(9h + 5k - 8) = 36gh + 20gk - 32g$

12.  $4vw + 8vw - 8vw = 4vw$

13.  $6p \cdot 3q = 18pq$

14.  $3 \cdot m \cdot n = 3mn$

15.  $16c : 4 = 4c$

16.  $(21a + 18b) : 3 = 21a : 3 + 18b : 3 = 7a + 6b$

17.  $m + 8n = m + 8n$  (unverträgliche Monome!)

18.  $4(7a - 5b) = 28a - 20b$

19.  $90u + (221u - 218u) = 90u + 3u = 93u$

20.  $(xyz)^5 = x^5y^5z^5$

$$\begin{aligned}
21. \quad 19gh - (11gk + 4g(4h - 2k)) &= 19gh - (11gk + 16gh - 8gk) \\
&= 19gh - (3gk + 16gh) \\
&= 19gh - 3gk - 16gh \\
&= 3gh - 3gk
\end{aligned}$$

$$22. (5b)^2 = 5b \cdot 5b = 25b^2$$

$$23. 15uvw : (3v : 5w) = 15uvw : 3v \cdot 5w = 5uw \cdot 5w = 25uw^2$$

$$24. 4p - 2q = 4p - 2q \text{ (unverträgliche Monome!)}$$

$$25. 17x - x = 16x$$

$$26. 4ab^2 + 8a^2b + 5b^2a = 9ab^2 + 8a^2b$$

$$27. (9de - 21ef) : 3e = 9de : 3e - 21ef : 3e = 3d - 7f$$

$$28. 4gh + 6hg = 10gh$$

$$29. a + 1 + a - 1 = 2a$$

$$30. 0 \cdot e = 0$$

$$31. 3s + 9s = 12s$$

$$32. 15a \cdot (3b : 3a) = 15a \cdot 3b : 3a = 15a : 3a \cdot 3b = 5 \cdot 3b = 15b$$

$$33. 120byz : (5y \cdot 4z) = 120byz : 5y : 4z = 24bz : 4z = 6b$$

$$34. 19d : d = 19$$

$$35. 14v - (2w - 7v) = 14v - 2w + 7v = 21v - 2w$$

$$36. 3ef \cdot 5fg \cdot 5gh = 75ef^2g^2h$$

$$37. 5ax \cdot 2xy = 10ax^2y$$

$$38. 7v + 4w + 7v - w = 14v + 3w$$

$$39. 5v(6w - w) = 5v \cdot 5w = 25vw$$

$$40. 8m^4 \cdot 5m^5 = 40m^9$$