

$$1. \quad 4a^2 + 5a + a^3 + 2a^2 + a^3 + 7a + 6a^2 = \underline{\underline{2a^3 + 12a^2 + 12a}}$$

$$2. \quad 7c^2 + 19d + 3c + 4d + 8c^2 + 25c + 16 = \underline{\underline{15c^2 + 28c + 23d + 16}}$$

$$3. \quad 3a^2b \cdot 4ab^3 \cdot 5b^2 = \underline{\underline{60a^3b^6}}$$

$$4. \quad a^3 \cdot 6a^2 \cdot 7b \cdot 2a^2 \cdot 5b^2 \cdot 3 = \underline{\underline{1260a^7b^3}}$$

$$5. \quad (12a^3b^2)^2 = 12a^3b^2 \cdot 12a^3b^2 = \underline{\underline{144a^6b^4}}$$

$$6. \quad (3ef^2g)^3 = 3ef^2g \cdot 3ef^2g \cdot 3ef^2g = \underline{\underline{27e^3f^6g^3}}$$

$$7. \quad 3p^2q \cdot 5pq^2 \cdot 2p \cdot 4q^2 \cdot 5 = \underline{\underline{600p^4q^5}}$$

$$8. \quad 39c^3d^4 : 13c^2d^3 = \underline{\underline{3cd}}$$

$$9. \quad 52c^5d^3 : 4cd^3 = \underline{\underline{13c^4}}$$

$$10. \quad 14a^2 + 15a + 3a^3 + 2a^2 + a^3 + 7a + 6a^2 = \underline{\underline{4a^3 + 22a^2 + 22a}}$$

$$11. \quad 17c^2 + 19d + 13c + 24d + 8c^2 + 25c + 16 = \underline{\underline{25c^2 + 38c + 43d + 16}}$$

$$12. \quad 13a^2b^2 \cdot 14a^2b^3 \cdot 15b^2 = \underline{\underline{2730a^4b^7}}$$

$$13. \quad a^3 \cdot 6a^2 \cdot 7b^3 \cdot 12a^2 \cdot 5b^2 \cdot 3 = \underline{\underline{7560a^7b^5}}$$

$$14. \quad (16a^3b^4)^2 = 16a^3b^4 \cdot 16a^3b^4 = \underline{\underline{256a^6b^8}}$$

$$15. \quad (13e^2f^3g)^3 = 13e^2f^3g \cdot 13e^2f^3g \cdot 13e^2f^3g = \underline{\underline{2197e^6f^9g^3}}$$

$$16. \quad 3p^2q \cdot 15pq^2 \cdot 2p^2 \cdot 14q \cdot 5 = \underline{\underline{6300p^5q^4}}$$

$$17. \quad 76c^4d^3 : 19c^3d^3 = \underline{\underline{4c}}$$

$$18. \quad 152c^5d^3 : 4cd = \underline{\underline{38c^4d^2}}$$

$$19. 76c^6d^3 : 19c^3d^3 = \underline{\underline{4c^3}}$$

$$20. 23c^2d^2 \cdot 12c^3d^4 \cdot 15c^2d^4 = \underline{\underline{4140c^7d^{10}}}$$

$$21. (17p^2q^3r)^3 = 17p^2q^3r \cdot 17p^2q^3r \cdot 17p^2q^3r = \underline{\underline{4913p^6q^9r^3}}$$

$$22. 228x^5y^4 : 4xy = \underline{\underline{57x^4y^3}}$$

$$23. 121e^2f^5 + 9e^4f^2 : 9e^4f^2 = \underline{\underline{121e^2f^5 + 1}}$$

$$24. 15a^3 \cdot 9ab^4 \cdot 7a^2b^5 = \underline{\underline{945a^6b^9}}$$

$$25. 4ab \cdot ab^3 \cdot 2 \cdot (5ab)^2 = 4ab \cdot ab^3 \cdot 2 \cdot 5ab \cdot 5ab = \underline{\underline{200a^4b^6}}$$

$$26. 852a^3x^6 : 12a^3x^2 = \underline{\underline{71x^4}}$$

$$27. 528a^6bc : 88ab = \underline{\underline{6a^5c}}$$

$$28. 2ab^2 \cdot 4a^2c^2 \cdot ab^3c^4 = \underline{\underline{8a^4b^5c^6}}$$

$$29. 120a^3b^2c : 15abc = \underline{\underline{8a^2b}}$$