8-1 Factors & CGFs Worksheet

Find the GCF of each pair of monomials.

1. $15x^4$ and $35x^2$ _____
2. $12p^2$ and $30q^5$ __6__
3. $-6t^3$ and $9t$ _____
4. $27y^3z$ and $45x^2y$ __9y__
5. $12ab$ and 12 _____
6. $-8d^3$ and $14d^4$ _____
7. $-m^8n^4$ and $3m^6n$ _____
8. $10gh^2$ and $5h$ _____

Find the GCF of each set of monomials.

9. $5x^3$, $15x^2$, $45x^5$ __$5x^2$__
10. $2p^2$, $-8q^5$, $10q^7$ _____
11. $6st^3$, $18s^2t$, $24st$ __6st__
12. $24x^2y^3$, $42x^2y$, $6x^4y^2$ _____
13. $12ab$, $12a^2b$, $12ab^2$ _____
14. $-8c^2d^3$, $4cd^4$, $-4c^3d$ _____
15. $-6m^4n^3$, $3m^2n$, $-3mn^2$ _____
16. $10g^2h^2$, $5g^3h$, $15g^4h^5$ _____

Find the GCF of each pair of expressions.

17. $5(x-3)$ and $25(x-3)^3$ _____
18. $-2(p+7)^2$ and $8(p+7)^4$ _____
19. $-8(t+1)^3$ and $8(t+1)^6$ _____
20. $-7(z-9)^8$ and $14(z-9)^2$ _____
21. $12(a-4)^5$ and $2(a-4)^4$ _____
22. $4(d+3)^9$ and $-4(d+3)^4$ _____
23. $9(m+7)^2$ and $3(m+7)^5$ _____
24. $10(g-5)^2$ and $5(g-5)^5$ _____

Find the GCF of each set of expressions.

25. $5(x+7)^4$, $35(x+7)^2$, $15(x+7)^3$ _____
26. $6(t-5)^3$, $9(t-5)^5$, $15(t-5)^7$ _____
27. $-4(a-2)$, $12(a-2)^5$, $20(a-2)^3$ _____
28. $-(n+6)^4$, $-3(n+6)^3$, $-3(n+6)^6$ _____