

Find $f^{-1}(x)$.

40. $f(x) = \frac{5-7x}{3}$

41. $f(x) = \frac{1}{4}x^3 + 2$

Determine whether f and g are inverses of each other.

42. $f(x) = \sqrt[5]{2x-7}$ $g(x) = \frac{x^5-7}{2}$

REVIEW ANSWERS

1. $\frac{1}{2}x^5y^{10}$

2. 6^9

3. $\frac{3^{10}x^6}{y^{15}}$

4. $\frac{6y^{16}}{25x^4}$

5. $\frac{1}{2b}$

6. $\frac{16f^{14}h^{18}}{9g^{13}}$

7. $\frac{m^{11}}{48pr^{26}}$

8. $\frac{4}{9x^6}$

9. 2.5×10^{-8}

10. 2.1×10^6

11. $3mn^5p^9\sqrt[3]{4mp^2}$

12. $|2r+3|$

13. $st^2\sqrt[8]{14s^7}$

14. $2b^2r^2|t^3|\sqrt[4]{3rt^2}$

15. $20|m^3|n^3\sqrt{10n}$

16. $fg^{20}\sqrt{f^{14}g^{11}}$

17. $p^2\sqrt{p^2q^5}$

18. $11\sqrt[4]{2} - 7\sqrt{2}$

19. $120\sqrt[3]{6}$

20. 625

21. 3

22. $\frac{1}{10}$

23. $\frac{1}{1728}$

24. $\frac{32}{243}$

25. 1.898

26. 8

27. 32,768

28. 5

29. 28

30. -1 (must check)

31. -7 (must check)

32. 3, 6 (must check)

33. $\sqrt[3]{4}$, $\sqrt[3]{9}$

34. -128, 1

35.-38. See graphs

39. $y = 26.723598x^{0.2432556}$
83.8 years

40. $f^{-1}(x) = \frac{5-3x}{7}$

41. $f^{-1}(x) = \sqrt[3]{4x-8}$

40. No

35-38.

