



ACT COMPASS Preparation Worksheet

Pre-algebra: Exponents

1. $4^2 \cdot 4^2 = 4^4$

2. $3^2 \cdot 3^2 = 3^4$

3. $2n^4 \cdot 5n^4 = 10n^8$

4. $2n^4 \cdot 6n^4 = 12n^8$

5. $5b^2 \cdot 8b = 40b^3$

6. $6x \cdot 2x^2 = 12x^3$

7. $7v^3 \cdot 10u^3v^5 \cdot 8uv^3 = 560v^{11}u^4$

8. $6n^3n^3 \cdot 8m^2n^3 = 48m^5n^6$

9. $7u^2v^5 \cdot 9uv^3 = 63u^3v^8$

10. $10xy^3 \cdot 8x^5y^3 = 80x^6y^6$

11. $(2x^2)^2 = 4x^4$

12. $(k^3)^4 = k^{12}$

13. $(x^2)^3 = x^6$

14. $\frac{5^4}{5} = 5^3$

15. $\frac{2^2}{2^3} = \frac{1}{2}$

16. $\frac{3r^3}{2r} = \frac{3r^2}{2}$

17. $\frac{10p^4}{6p} = \frac{5p^3}{3}$

18. $\frac{8m^3}{10m^3} = \frac{4}{5}$

19. $\frac{2n^2}{n} = 2n$

20. $\frac{12x^3}{9y^8} = \frac{4x^3}{3y^8}$

21. $\frac{11u^4}{17u^7v^9} = \frac{11}{17u^3v^9}$

22. $\frac{12yx^4}{10yx^8} = \frac{6}{5x^4}$

23. $\frac{5n^8}{20n^8} = \frac{1}{4}$

24. $(3a^2)^3 = 27a^6$

25. $(3x^4)^4 = 81x^{16}$

26. $(7y^4)^2 = 49y^8$

27. $(2x^4y^4)^3 = 8x^{12}y^{12}$

28. $(x^2y^2)^2 = x^4y^4$

29. $(u^4v^3)^2 = u^8v^6$

30. $(2x^4y^4)^3 = 8x^{12}y^{12}$

31. $(3x^2 \cdot 2x^2)^2 = 36x^8$

32. $(4x^4 \cdot x^4)^3 = 64x^{24}$