

ACT COMPASS Preparation Worksheet

Algebra: Basic Operations/ Polynomials

- $(9b^2 - 12b - 12) - (-4b^2 - 24b - 32) =$
- $(2y^4 - y^2 - 15) + (4y^2 - 36) =$
- $(-2c^4 + 20c^2 - 42) + (c^4 + 4c^2 - 3c) =$
- $(7x^3 + 3x^2 - 4x - 10) - (4x^3 - 3x^2 + 12x + 1) =$
- $(-2x^4 + 20x^2 - 42) - (x^2 - 49) =$
- $(x^2 - 8) - (4x^2 - 3x + 5) =$
- $(-6m^2 - 8m + 5) - (-5m^2 + 7m - 8) =$
- $(4x^2 - 5x + 2) + (-9x^2 + 3x - 7) =$
- $(3x^5 - 9x^3 + 4x^2) + (-8x^5 + 8x^3 + 2) =$
- $(4x^4 - 3x^2 - 5x + 2) - (-2x^4 + 3x^3 - 4x + 7) =$
- $(3x^2)(5x^3) =$
- $(4x^4)(-3x^2) =$
- $(8y^3)(-4y^5) =$
- $(2z)(-3z)(4z^5) =$
- $3x(4x - 7) =$
- $5x(-2x + 9) =$
- $8x^3(4x^2 + 3x + 2) =$
- $-9x^2(3x^3 + 7x - 2) =$
- $(x + 3)(x + 5) =$
- $(7x + 6)(2x + 3) =$



21. $(5x + 8)(2x + 1) =$

22. $(x - 3)(x - 5) =$

23. $(3x - 7)(x - 1) =$

24. $(6x - 2)(7x - 6) =$

25. $(x^2 - 1)(x + 3) =$

26. $(2x + 4)(x^2 - 8) =$

27. $(x - 5)(x^2 - 7x - 2) =$

28. $(x + 2)(x^2 - 2x + 4) =$

29. $(x + 8)^2 =$

30. $(2x - 7)^2 =$

31. $(3x + 1)^2 =$

32. $(x + 4)(x - 4) =$

33. $(x^2 + 5)(x^2 - 5) =$

34. $\frac{3x^5 + 3x^3 + 18x}{6} =$

35. $\frac{y - 4y^2 + y^4}{y} =$

36. $\frac{27x^8 - 15x^4 + 3x^2}{x^2} =$

37. $\frac{25x^7 - 20x^4 + 5x^2}{-5x^2} =$

38. $\frac{36y^5 + 27y^4 - 18y^3}{9y^2} =$

39. $\frac{8r^2s^2 + 10rs^3 - 6r^2s}{-2rs} =$

40. $\frac{7x^3y^2 - 21x^2y + 35x^3y^4}{7x^2y} =$