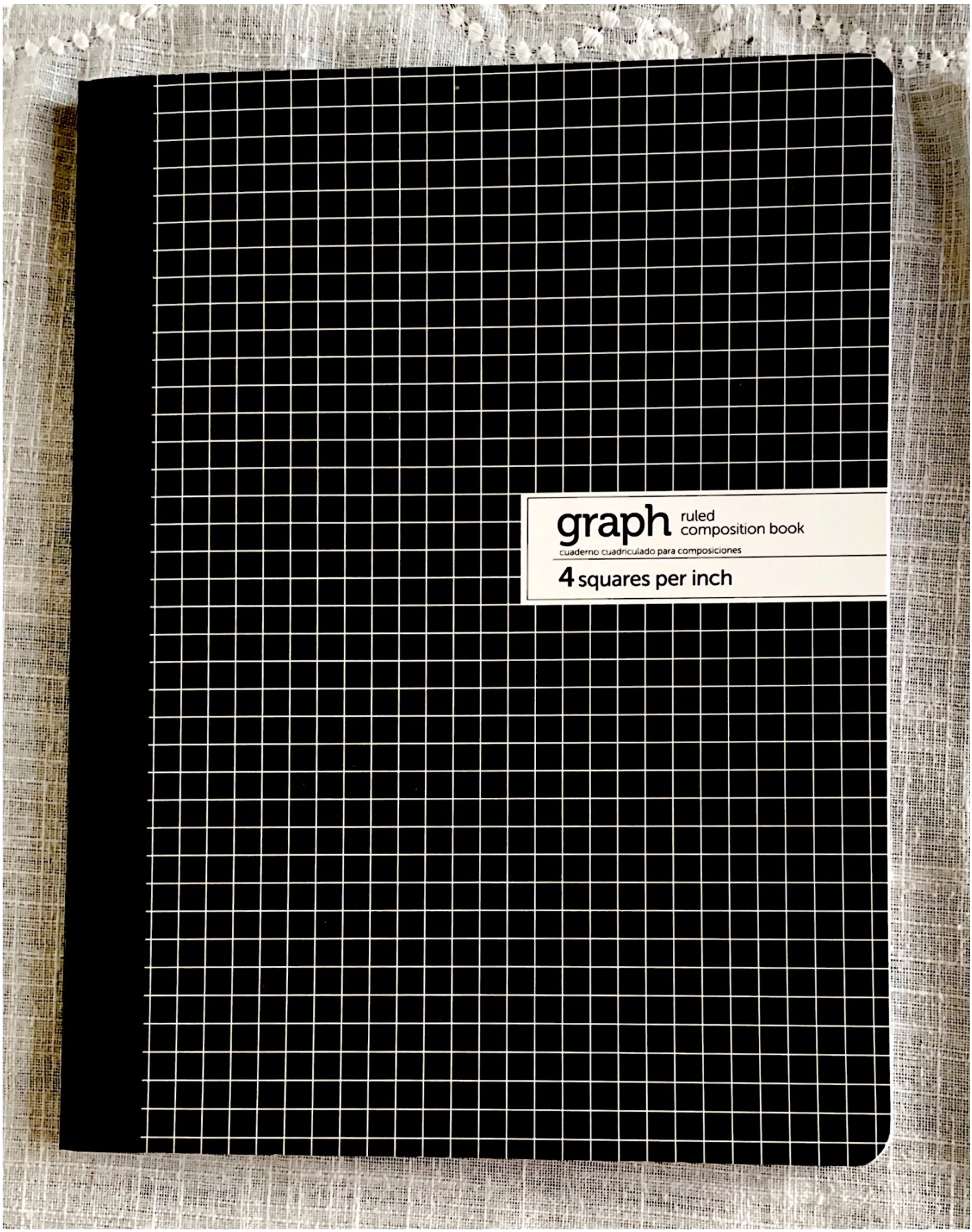
graph ruled
composition book
cuaderno cuadriculado para composiciones
4 squares per inch

ALG II W/ TRIG

2022-2023

5/14

Start 1:35
End 2:05
Elapsed Time 30 min

Basic Concepts from Algebra

R.3 Exponents, Polynomials, Factoring

11. $(-4x^5)(4x^2) = (-4\cdot4)(x^5x^2) = -16^{5+2} = -16x^7$ (x)

12. $(3y^4)(-6y^3) = (3\cdot-6)(y^4y^3) = -18^{4+3} = -18y^7$ (y)

13. $n^6\cdot n^4\cdot n = (n\cdot n\cdot n\cdot n\cdot n\cdot n)(n\cdot n\cdot n\cdot n)(n) = n^{6+4+1} = n^{11}$

14. $a^8\cdot a^5\cdot a = (a\cdot a\cdot a\cdot a\cdot a\cdot a\cdot a\cdot a)(a\cdot a\cdot a\cdot a\cdot a)(a) = a^{8+5+1} = a^{14}$

15. $9^3\cdot 9^5 = 9^{3+6} = 9^8$

16. $4^2\cdot 4^8 = 4^{2+8} = 4^{10}$

17. $(-3m^4)(6m^2)(-4m^5) = (-3\cdot6\cdot-4)(m^4m^2m^5) = 72m^{4+2+5} = 72m^{11}$

18. $(-8t^3)(2t^6)(-5t^4) = (-8\cdot2\cdot-5)(t^3t^6t^4) = 80t^{3+6+4} = 80t^{13}$

19. $(5x^2y)(-3x^3y^4) = (5\cdot-3)(x^2x^3y^1y^4) = -15x^{2+3}y^{1+4} = -15x^5y^5$

20. $(-4xy^3)(7x^2y) = (-4\cdot7)(x^1x^2y^3y^1) = -28x^{1+2}y^{3+1} = -28x^3y^4$

21. $(\frac{1}{2}mn)(8m^2n^2) = (\frac{1}{2}\cdot8)(m^1m^2n^1n^2) = 4m^{1+2}n^{1+2} = 4m^3n^3$

22. $(35m^4n)(-\frac{2}{7}mn^2)\ (35\cdot-\frac{2}{7})(m^4m^1n^1n^2) = \frac{70}{7}m^{4+1}n^{1+2} = 10m^5n^3$

23. $(2^2)^5 = (2^2\cdot2^2\cdot2^2\cdot2^2\cdot2^2) = 2^{2+2+2+2+2} = 2^{10}$

24. $(6^4)^3 = (6^4\cdot6^4\cdot6^4) = 6^{4+4+4} = 6^{12}$

25. $(-6x^2)^3$ $((\underline{6}\cdot x\cdot x)(\underline{6}\cdot x\cdot x)(\underline{6}\cdot x\cdot x))-6^3 = 216, -216x^{2+2+2} = -216x^6$