

8 Rational Functions



2A.10.G

8.1 Model Inverse and Joint Variation

2A.10.A

8.2 Graph Simple Rational Functions

2A.10.F

8.3 Graph General Rational Functions

2A.2.A

8.4 Multiply and Divide Rational Expressions

2A.10.F

8.5 Add and Subtract Rational Expressions

2A.10.D

8.6 Solve Rational Equations



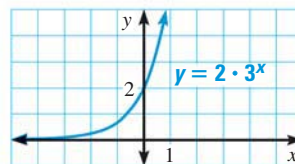
Before

In previous chapters, you learned the following skills, which you'll use in Chapter 8: writing direct variation equations, factoring polynomials, and performing polynomial operations.

Prerequisite Skills

VOCABULARY CHECK

1. The **asymptote** of the graph at the right is ?.
2. Two variables x and y show **direct variation** provided ? where a is a nonzero constant.
3. An **extraneous solution** of a transformed equation is not an actual ? of the original equation.



SKILLS CHECK

The variables x and y vary directly. Write an equation that relates x and y . Then find the value of y when $x = -2$. (Review p. 107 for 8.1.)

4. $x = 2, y = 8$

5. $x = -1, y = 4$

6. $x = 12, y = 2$

Factor the polynomial completely. (Review pp. 252, 353 for 8.4, 8.5.)

7. $x^2 - 11x - 26$

8. $2x^3 - 4x^2 + 2x$

9. $6x^4 - 4x^3 - 24x + 16$

Perform the indicated operation. (Review p. 346 for 8.4, 8.5.)

10. $(3x^2 - 6) + (7x^2 - x)$

11. $(-2x^2 + 6) - (x^2 - x)$

12. $(x + 2)(x - 9)^2$



TEXAS

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Prerequisite skills practice at classzone.com