

Answers

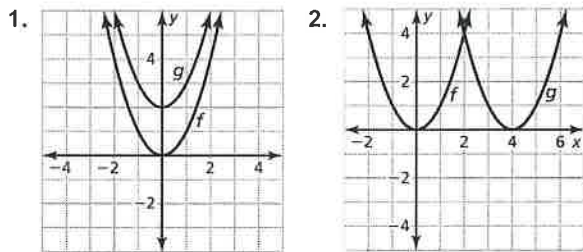
- b. $R(x) = -2x^2 + 370x$
- c. \$17,112
- d. 92 or 93
- e. $C(x) = 30x + 312$
- f. $P(x) = -2x^2 + 340x - 312 > 0$
- g. between 1 and 169, including 1 and 169
- h. \$14,138; 85 handbags

3.6 Puzzle Time

BAGELS

Chapter 4

4.1 Cumulative Practice



The graph of g is a vertical translation 2 units up of the graph of f .

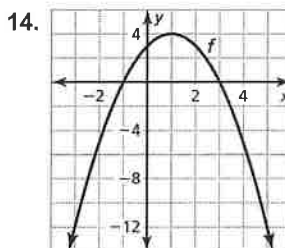
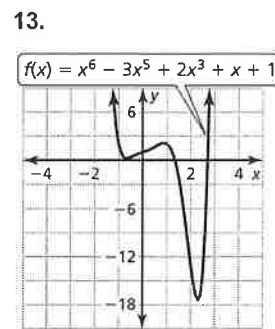
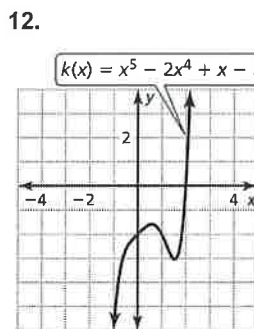
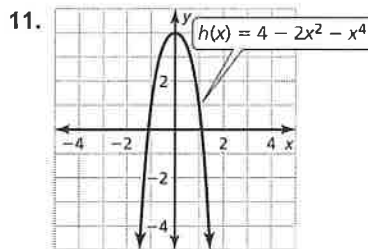
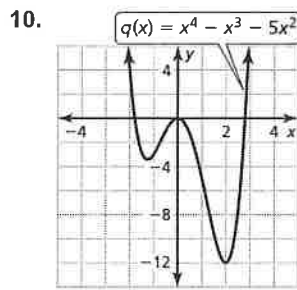
The graph of g is a horizontal translation 4 units right of the graph of f .

4.1 Prerequisite Skills Practice

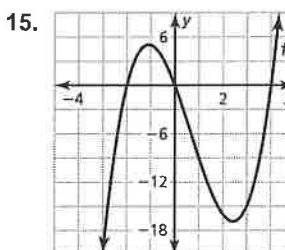
- 1. -20
- 2. 39

4.1 Extra Practice

- 1. not a polynomial function
- 2. polynomial function; $f(x) = 11x^2 + 12x - \sqrt{7}$, degree is 2, quadratic, leading coefficient is 11
- 3. polynomial function; $g(x) = 2x^4 - \sqrt{14}x^3 - \frac{1}{3}x^2 + 2x - \frac{5}{3}$, degree is 4, quartic, leading coefficient is 2
- 4. not a polynomial function
- 5. 1841
- 6. $-\frac{47}{9}$
- 7. $-\frac{5}{8}$
- 8. $g(x) \rightarrow -\infty$ as $x \rightarrow +\infty$ and $g(x) \rightarrow -\infty$ as $x \rightarrow -\infty$.
- 9. $h(x) \rightarrow +\infty$ as $x \rightarrow +\infty$ and $h(x) \rightarrow -\infty$ as $x \rightarrow -\infty$.



The degree is even and the leading coefficient is negative.



The degree is odd and the leading coefficient is positive.