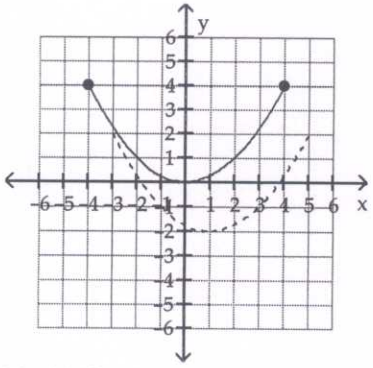
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) $(-\infty, \infty)$
ID: CA3Z 2.3.7-1
Objective: (2.3) Find the Domain of a Function

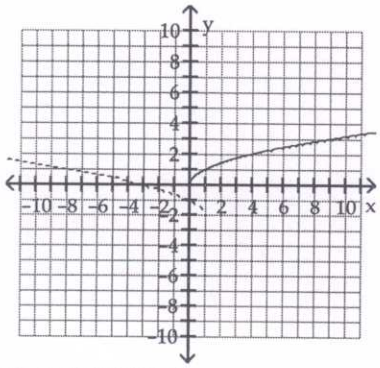
2) -12
ID: CA3Z 2.3.6-5
Objective: (2.3) Understand and Use Piecewise Functions

3)



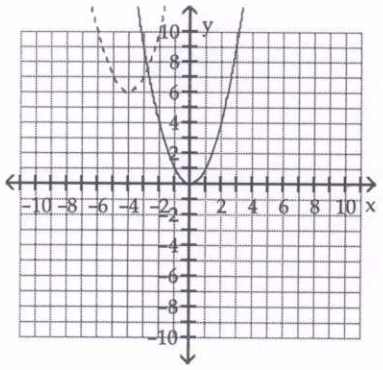
ID: CA3Z 2.5.6-11
Objective: (2.5) Graph Functions Involving a Sequence of Transformations

4)



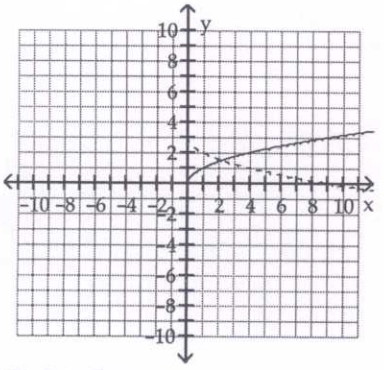
ID: CA3Z 2.5.6-5
Objective: (2.5) Graph Functions Involving a Sequence of Transformations

5)



ID: CA3Z 2.5.6-1
Objective: (2.5) Graph Functions Involving a Sequence of Transformations

6)



ID: CA3Z 2.5.4-2
Objective: (2.5) Use Reflections to Graph Functions

7) $\frac{2x^2 - 7x}{x^2 - 3x - 28}$

ID: CA3Z 2.6.1-2
Objective: (2.6) Combine Functions Arithmetically, Specifying Domains

8) $28x^2 + 53x + 24$
ID: CA3Z 2.6.1-5
Objective: (2.6) Combine Functions Arithmetically, Specifying Domains

9) g(x) and h(x)
ID: CA3Z 2.7.1-5
Objective: (2.7) Verify Inverse Functions

10) Yes
ID: CA3Z 2.7.3-6
Objective: (2.7) Use the Horizontal Line Test to Determine if a Function Has an Inverse Function

11) $5x - 8$
ID: CA3Z 3.3.1-2
Objective: (3.3) Use Long Division to Divide Polynomials

12) $3x^2 - 5x + 5$
ID: CA3Z 3.3.1-3
Objective: (3.3) Use Long Division to Divide Polynomials

13) f(−2) = −19; f(−1) = 1
ID: CA3Z 3.5.2-1
Objective: (3.5) Approximate Real Zeros

14) −0.38
ID: CA3Z 3.5.2-4
Objective: (3.5) Approximate Real Zeros

15) {1 + i, 1 − i, −10}
ID: CA3Z 3.5.3-3
Objective: (3.5) Use Conjugate Roots to Solve a Polynomial Equation

16) $\{3 + 2i, 3 - 2i, 3, \frac{1}{3}\}$
ID: CA3Z 3.5.3-5
Objective: (3.5) Use Conjugate Roots to Solve a Polynomial Equation

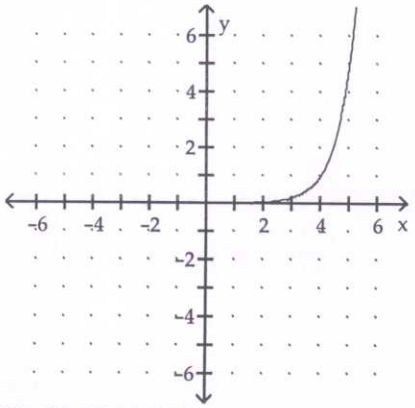
17) 1 in. by 3 in. by 5 in.
ID: CA3Z 3.4.3-5
Objective: (3.4) Solve Polynomial Equations

18) $\pm\frac{1}{6}, \pm\frac{1}{3}, \pm\frac{1}{2}, \pm\frac{2}{3}, \pm 1, \pm 2$
ID: CA3Z 3.4.1-3
Objective: (3.4) Use the Rational Zero Theorem to Find Possible Rational Zeros

19) f(−2) = −26; f(−1) = 3
ID: CA3Z 3.5.2-1
Objective: (3.5) Approximate Real Zeros

20) −2 and 3
ID: CA3Z 3.5.1-3
Objective: (3.5) Find Bounds for the Roots of a Polynomial Equation

21)



ID: CA3Z 4.1.2-11
Objective: (4.1) Graph Exponential Functions

22) 6.498
ID: CA3Z 4.1.1-1
Objective: (4.1) Evaluate Exponential Functions

23) 3
ID: CA3Z 4.3.5-5
Objective: (4.3) Condense Logarithmic Expressions

24) $\log_2 (x - 3) - 3\log_2 x$
ID: CA3Z 4.3.4-3
Objective: (4.3) Expand Logarithmic Expressions

25) $6^x = 36$
ID: CA3Z 4.2.1-4
Objective: (4.2) Change from Logarithmic to Exponential Form

26) $\log_8 2 = \frac{1}{3}$
ID: CA3Z 4.2.2-4
Objective: (4.2) Change from Exponential to Logarithmic Form

27) -0.39
ID: CA3Z 4.4.1-8
Objective: (4.4) Solve Exponential Equations

28) {50}
ID: CA3Z 4.4.2-6
Objective: (4.4) Solve Logarithmic Equations

29) 7.9 years
ID: CA3Z 4.4.3-1
Objective: (4.4) Solve Applied Problems Involving Exponential and Logarithmic Equations

30) 1.04
ID: CA3Z 4.4.1-7
Objective: (4.4) Solve Exponential Equations

31) $\begin{bmatrix} -15 & 10 \\ 0 & 10 \end{bmatrix}$
ID: CA3Z 6.3.4-1
Objective: (6.3) Perform Scalar Multiplication

32) $a = 8; x = 8$
ID: CA3Z 6.3.2-3
Objective: (6.3) Understand What is Meant by Equal Matrices

33) $-5x + 2y = -9$
$4x + 7y = -6$
ID: CA3Z 6.4.2-6
Objective: (6.4) Use Inverses to Solve Matrix Equations

34) $B = A^{-1}$
ID: CA3Z 6.4.1-8
Objective: (6.4) Find the Multiplicative Inverse of a Square Matrix

35) $\{(\frac{8}{3}, -3)\}$
ID: CA3Z 6.5.2-7
Objective: (6.5) Solve a System of Linear Equations in Two Variables Using Cramer's Rule

36) {(7, 6, 8)}
ID: CA3Z 6.5.4-3
Objective: (6.5) Solve a System of Linear Equations in Three Variables Using Cramer's Rule

37) {(−4, 3, 5, −2)}
ID: CA3Z 6.1.4-5
Objective: (6.1) Use Matrices and Gauss-Jordan Elimination to Solve Systems

38) $\left[\begin{array}{ccc|c} 6 & 9 & 2 & 53 \\ 3 & 9 & 4 & 43 \\ 2 & 9 & 4 & 41 \end{array}\right]$
ID: CA3Z 6.1.1-1
Objective: (6.1) Write the Augmented Matrix for a Linear System

39) $\begin{bmatrix} 1 & 2 & -10 & -70 \\ 0 & 1 & -5 & -35 \\ 0 & 0 & 1 & 7 \\ 0 & 0 & 0 & 1 \end{bmatrix}$

ID: CA3Z 6.4.1-18
Objective: (6.4) Find the Multiplicative Inverse of a Square Matrix

40) $\begin{bmatrix} -6 & -33 \\ 11 & 61 \end{bmatrix}$
ID: CA3Z 6.4.3-2
Objective: (6.4) Encode and Decode Messages

41) $\sum_{k=0}^{10} 7 + 3k$
ID: CA3Z 8.1.4-17
Objective: (8.1) Use Summation Notation

42) 5, 0, −5, −10
ID: CA3Z 8.1.2-1
Objective: (8.1) Use Recursion Formulas

43) 2.05
ID: CA3Z 8.2.1-4
Objective: (8.2) Find the Common Difference for an Arithmetic Sequence

44) −9550
ID: CA3Z 8.2.4-2
Objective: (8.2) Use the Formula for the Sum of the First n Terms of an Arithmetic Sequence

45) 640
ID: CA3Z 8.3.3-1
Objective: (8.3) Use the Formula for the General Term of a Geometric Sequence

46) $\frac{2}{9}$

ID: CA3Z 8.3.6-8
Objective: (8.3) Use the Formula for the Sum of an Infinite Geometric Series

47) $a_n = 6 \cdot (-2)^{n-1}$
ID: CA3Z 8.3.3-10
Objective: (8.3) Use the Formula for the General Term of a Geometric Sequence

48) $\frac{4}{5}$

ID: CA3Z 8.3.6-2
Objective: (8.3) Use the Formula for the Sum of an Infinite Geometric Series

49) $\frac{1}{27}x^3 + \frac{2}{3}x^2 + 4x + 8$

ID: CA3Z 8.5.3-2
Objective: (8.5) Expand a Binomial Raised to a Power

50) $-20{,}127{,}744x^3y^{11}$

ID: CA3Z 8.5.4-6
Objective: (8.5) Find a Particular Term in a Binomial Expansion