

EOC Review by Standards Key

1. D, but only if  $(x+2)$  is changed to  $(x+3)$
2.  $x^2 - (x + 1)^2 = x^2 - (x^2 + 2x + 1) = x^2 - x^2 - 2x - 1 = -2x - 1$   
which is odd because  $2x$  has to be even and one more than an even number will always be odd.
3. C
4. 3
5. D

1. B
2. A
3. 3
4. C
5.  $(x - 4)(2x^2 + 3x + 1) = 2x^3 - 5x^2 - 11x - 4$  By synthetic division, when division by  $x - 4$  was performed, the remainder was zero and the other factor was found.

1. C
  2. ??? Formula looks flawed
  3. A
  4. B
  5. A
  6. 4
  7.  $-\frac{3}{4}$
  8.  $-\frac{15}{2}$
1. B
  2. B
  3. C, but the first part is missing an equal to sign
  4. C
  5. 2
  6. D
  7. Poorly written.
  8. D

1. D
2. A
3.  $-1.5 < x < 1.5$

4. Poor question again
5. A

1. Box 2 and 6
2. Missing equation
3. 4
4. D
5. D

1. D
2. C
3. B
4. C
5. B

1. C
2. D
3. B

Functions and Modeling

1. B
  2. Box 3 and Box 4
  3. D
  4. B
  5. B
  6. D; 16
  7. 23
1. A
  2. C
  3. New vertex at  $(-1, -2)$ ; shape same
  4. A
  5. D
  6. Box 4, Box 5, Box 7
  7. D; Box 1, Box 4

1. D
2. D
3. A
4. C
5.  $A'(1, -2)$

1. C
2. D; A

3. D
4. B
5. B
6. A
7. A
8. D

1. B
2. A
3. Box 1, Box 3

1. C
2. 3
3. D
4. C
5. A
6. Box 4, Box 5; Box 1
7. B
8. Box 2, Box 7
9. D
10. C
11. D
12. A

1. B
2. No equation
3.  $4^5 = x + 7$
4.  $\ln 1.4524525 = 10r; r = \frac{\ln 1.4524525}{10}; 3.73\%$