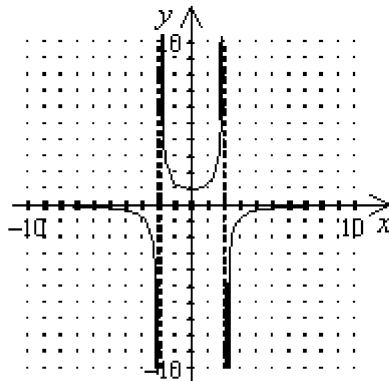


Pre-Calculus Mid-Term Review Sheet 1

Answer Section

1. ANS:

Asymptotes $y = 0; x = 2; x = -2$

PTS: 1

DIF: Level B

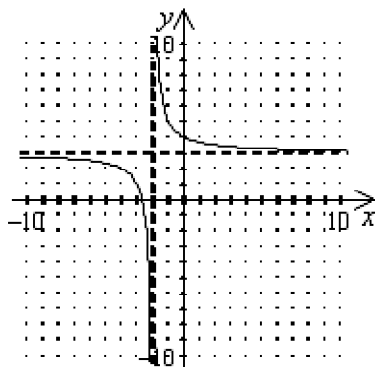
REF: HMAL0786

TOP: Objective 3

KEY: graph | rational | function | asymptote

NOT: 0-978-0-547-04983-0

2. ANS:

Asymptotes $x = -2; y = 3$

PTS: 1

DIF: Level B

REF: HMLC0012

TOP: Objective 3

KEY: equation | radical | graph | rational | translation

NOT: 0-978-0-547-04983-0

3. ANS:

$$f^{-1}(x) = 6x + 8$$

PTS: 1

DIF: Level B

REF: HMAL0263

TOP: Objective 4

KEY: equation | function | inverse

NOT: 0-978-0-547-04983-0

4. ANS:

$$f^{-1}(x) = \frac{x^2 - 6x - 23}{-80}, x \geq 0$$

PTS: 1 DIF: Level B REF: HMAL0264 TOP: Objective 4
 KEY: radical | quadratic | function | inverse NOT: 0-978-0-547-04983-0

5. ANS:

$$\sqrt{x+3} - 1$$

PTS: 1 DIF: Level B REF: HMAL0563 TOP: Objective 2
 KEY: function NOT: 0-978-0-547-04983-0

6. ANS:

- (a) $4x + 8$
 (b) $4x + 23$

PTS: 1 DIF: Level B REF: HMAL0564 TOP: Objective 2
 KEY: function NOT: 0-978-0-547-04983-0

7. ANS:

$$x \geq 10$$

PTS: 1 DIF: Level B REF: HMAL0203 TOP: Objective 3
 KEY: radical | quadratic | function | domain NOT: 0-978-0-547-04983-0

8. ANS:

$$x \geq 0$$

PTS: 1 DIF: Level B REF: HMAL0531 TOP: Objective 3
 KEY: radical | function | domain | range NOT: 0-978-0-547-04983-0

9. ANS:

Horizontal asymptote⁵⁸ $y = 1$

Vertical asymptote⁵⁸ $x = -\frac{3}{4}$

PTS: 1 DIF: Level B REF: HMAL0672 TOP: Objective 2
 KEY: asymptote | division | rational function NOT: 0-978-0-547-04983-0

10. ANS:

Horizontal asymptote⁵⁸ $y = 2$

Vertical asymptotes⁵⁸ $x = -2, x = 2$

PTS: 1 DIF: Level B REF: HMAL0673 TOP: Objective 2
 KEY: equation | rational | asymptote NOT: 0-978-0-547-04983-0