College Algebra Answers to the Review for Test 2

1a. $(-3,-4)$ 1b. $(-1,0),(-5,0)$ 1c. $(0,5)$ 2a. $\left(\frac{1}{2},\frac{49}{4}\right)$ 2b. $(-3,0),(4,0)$

2c. $(0,12)$ 2d. $-\left(x-\frac{1}{2}\right)^2+\frac{49}{4}$ 3a. $y=(x+5)(x-4)$ 3b. $y=-(x+5)(x-4)$

4. 20, 700 5. $(x+4)$ 6. $3x^2+3+\frac{3}{x^2-1}$ 7. $6x^3-27x+\frac{1}{x-\frac{2}{3}}$ 8. -210

9. $(-3,7)$ 10. 7 11. $\frac{2}{3},-\frac{5}{4},\pm i$ 12. $1(mult\ 2),\pm 3i;\ (x-1)^2(x+3i)(x-3i)$ 13. $a=5,b=-8$

14. i 15. $(21+5\sqrt{2})+(7\sqrt{5}-3\sqrt{10})i$ 16. $p(x)=x^3+2x^2+4x+8$

17. $p(x)=(x-5)(x-2)(x+2)(x+3)^3$ 18a. VA: $x=3$; HA: $y=0$

18b. VA: $x=-1$;OA: $y=x$ 19. Many possible one example: $f(x)=\frac{5x^2+1}{x(x-3)}$