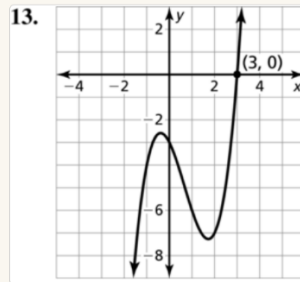
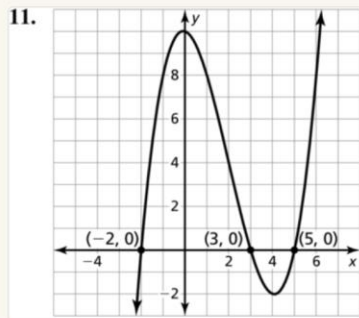
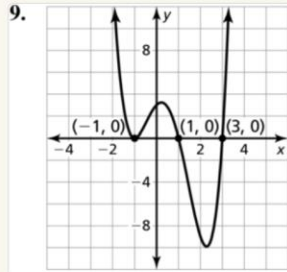
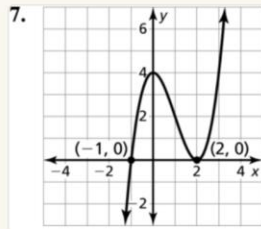
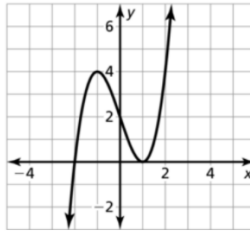


3. A

5. B



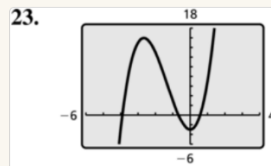
15. The x-intercepts should be -2 and 1 .



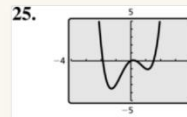
17. -1 , 1 , and 4

19. -4 , $-\frac{1}{2}$, and 1

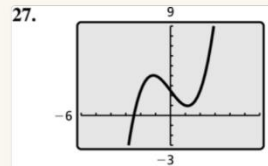
21. -4 , $\frac{3}{4}$, and 3



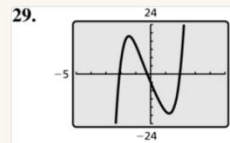
The x-intercepts of the graph are $x \approx -3.90$, $x \approx -0.67$, and $x \approx 0.57$. The function has a local maximum at $(-2.67, 15.96)$ and a local minimum at $(0, -3)$; The function is increasing when $x < -2.67$ and $x > 0$ and is decreasing when $-2.67 < x < 0$.



The x-intercepts of the graph are $x \approx -1.88$, $x = 0$, $x \approx 0.35$, and $x \approx 1.53$. The function has a local maximum at $(0.17, 0.08)$ and local minima at $(-1.30, -3.51)$ and $(1.13, -1.07)$; The function is increasing when $-1.30 < x < 0.17$ and $x > 1.13$ and is decreasing when $x < -1.30$ and $0.17 < x < 1.13$.



The x-intercept of the graph is $x \approx -2.46$. The function has a local maximum at $(-1.15, 4.04)$ and a local minimum at $(1.15, 0.96)$; The function is increasing when $x < -1.15$ and $x > 1.15$ and is decreasing when $-1.15 < x < 1.15$.



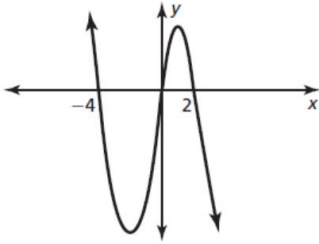
The x-intercepts of the graph are $x \approx -2.10$, $x \approx -0.23$, and $x \approx 1.97$. The function has a local maximum at $(-1.46, 18.45)$ and a local minimum at $(1.25, -19.07)$; The function is increasing when $x < -1.46$ and $x > 1.25$ and is decreasing when $-1.46 < x < 1.25$.

31. $(-0.29, 0.48)$ and $(0.29, -0.48)$; $(-0.29, 0.48)$ corresponds to a local maximum and $(0.29, -0.48)$ corresponds to a local minimum; The real zeros are $-0.5, 0,$ and 0.5 . The function is of at least degree 3.

33. $(1, 0), (3, 0),$ and $(2, -2)$; $(1, 0)$ and $(3, 0)$ correspond to local maximums, and $(2, -2)$ corresponds to a local minimum; The real zeros are 1 and 3. The function is of at least degree 4.

35. $(-1.25, -10.65)$; $(-1.25, -10.65)$ corresponds to a local minimum; The real zeros are -2.07 and 1.78 . The function is of at least degree 4.

37.



39. odd

41. even

43. neither

45. even