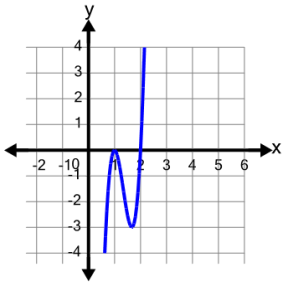
Name

Function Root Behaviour (Polynomials) - Graph to Roots and Multiplicity

1 What are the roots and multiplicities shown by this graph?



A: $x = 0$ (multiplicity 2), $x = 2$ (multiplicity 1)

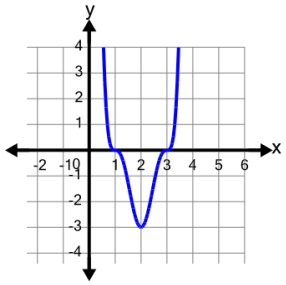
B: $x = 1$ (multiplicity 2), $x = 2$ (multiplicity 1)

C: $x = -2$ (multiplicity 2), $x = -1$ (multiplicity 1)

D: $x = 1$ (multiplicity 1), $x = 2$ (multiplicity 2)

E: $x = -2$ (multiplicity 1), $x = -1$ (multiplicity 2)

2 What are the roots and multiplicities shown by this graph?



A: $x = 1$ (multiplicity 2), $x = 3$ (multiplicity 3)

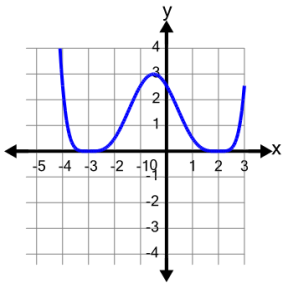
B: $x = -3$ (multiplicity 3), $x = -1$ (multiplicity 3)

C: $x = 1$ (multiplicity 3), $x = 3$ (multiplicity 3)

D: $x = -3$ (multiplicity 3), $x = 1$ (multiplicity 3)

E: $x = -1$ (multiplicity 3), $x = 3$ (multiplicity 3)

3 What are the roots and multiplicities shown by this graph?



A: $x = -3$ (multiplicity 4), $x = 1$ (multiplicity 4)

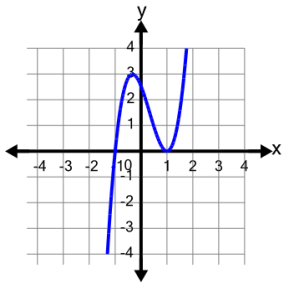
B: $x = -3$ (multiplicity 4), $x = 2$ (multiplicity 4)

C: $x = 2$ (multiplicity 4), $x = 3$ (multiplicity 4)

D: $x = -2$ (multiplicity 4), $x = 3$ (multiplicity 4)

E: $x = -3$ (multiplicity 4), $x = -2$ (multiplicity 4)

4 What are the roots and multiplicities shown by this graph?



A: $x = -1$ (multiplicity 1), $x = 1$ (multiplicity 2)

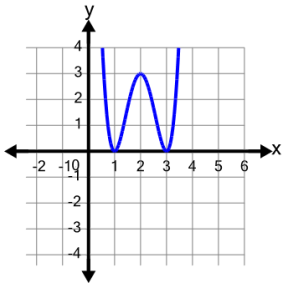
B: $x = -1$ (multiplicity 2), $x = 1$ (multiplicity 2)

C: $x = -1$ (multiplicity 1), $x = 1$ (multiplicity 1)

D: $x = 1$ (multiplicity 1), $x = 2$ (multiplicity 1)

E: $x = -1$ (multiplicity 2), $x = 1$ (multiplicity 1)

5 What are the roots and multiplicities shown by this graph?



A: $x = -3$ (multiplicity 2), $x = -1$ (multiplicity 2)

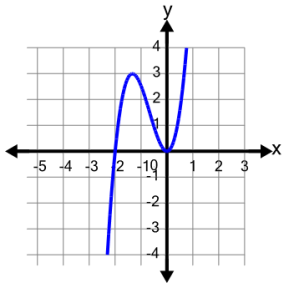
B: $x = -3$ (multiplicity 2), $x = 1$ (multiplicity 2)

C: $x = 2$ (multiplicity 2), $x = 3$ (multiplicity 2)

D: $x = 1$ (multiplicity 2), $x = 3$ (multiplicity 2)

E: $x = -1$ (multiplicity 2), $x = 3$ (multiplicity 2)

6 What are the roots and multiplicities shown by this graph?



A: $x = 1$ (multiplicity 1), $x = 2$ (multiplicity 1)

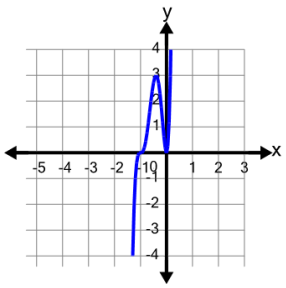
B: $x = -2$ (multiplicity 2), $x = 0$ (multiplicity 2)

C: $x = -2$ (multiplicity 1), $x = 0$ (multiplicity 2)

D: $x = 0$ (multiplicity 2), $x = 2$ (multiplicity 1)

E: $x = -2$ (multiplicity 2), $x = 0$ (multiplicity 1)

7 What are the roots and multiplicities shown by this graph?



A: $x = 0$ (multiplicity 2), $x = 1$ (multiplicity 3)

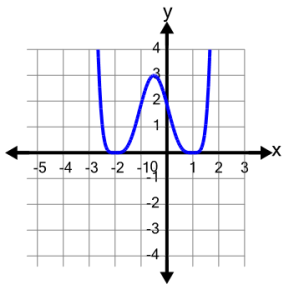
B: $x = -2$ (multiplicity 3), $x = -1$ (multiplicity 2)

C: $x = -1$ (multiplicity 2), $x = 0$ (multiplicity 3)

D: $x = 2$ (multiplicity 1), $x = 3$ (multiplicity 1)

E: $x = -1$ (multiplicity 3), $x = 0$ (multiplicity 2)

8 What are the roots and multiplicities shown by this graph?



A: $x = -2$ (multiplicity 4), $x = -1$ (multiplicity 4)

B: $x = -1$ (multiplicity 4), $x = 2$ (multiplicity 4)

C: $x = -2$ (multiplicity 4), $x = 2$ (multiplicity 4)

D: $x = 1$ (multiplicity 4), $x = 2$ (multiplicity 4)

E: $x = -2$ (multiplicity 4), $x = 1$ (multiplicity 4)