

4.2 HW

For each polynomial function identify:

- a. Degree
- b. x-intercept(s)
- c. y-intercept
- d. End behavior
- e. Then graph

1. $y = (x - 2)(x + 3)(x - 1)^2$

2. $y = x(x - 1)(x + 1)^2$

3. $y = (x - 1)(x + 1)(x - 2)^2$

4.2 HW

For each polynomial function identify:

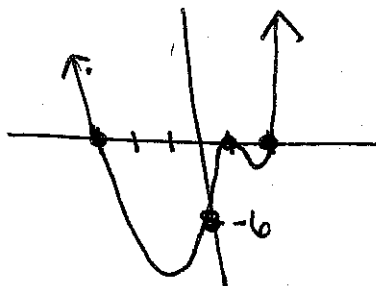
- Degree
- x-intercept(s)
- y-intercept
- End behavior
- Then graph

$$1. y = (x-2)(x+3)(x-1)^2$$

(a) Degree = 4 (d) $\uparrow \uparrow$

(b) $0 = (x-2)(x+3)(x-1)^2$
 $2, -3, 1^*$

(c) $(0-2)(0+3)(0-1)^2$
 $-2 \cdot 3 \cdot (-1)^2 = -6$

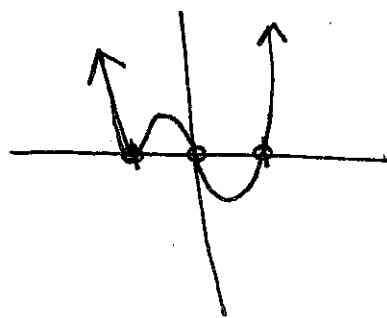


$$2. y = x(x-1)(x+1)^2$$

(a) Degree = 4 (d) $\uparrow \uparrow$

(b) $0 = x(x-1)(x+1)^2$
 $0, 1, -1^*$

(c) $y = 0(0-1)(0+1)^2$
 $0 \cdot -1 \cdot 1 = 0$



$$3. y = (x-1)(x+1)(x-2)^2$$

(a) Degree = 4 (d) $\uparrow \uparrow$

(b) $0 = (x-1)(x+1)(x-2)^2$
 $1, -1, 2^*$

(c) $y = (0-1)(0+1)(0-2)^2$
 $-1 \cdot 1 \cdot (-2)^2 = -4$

