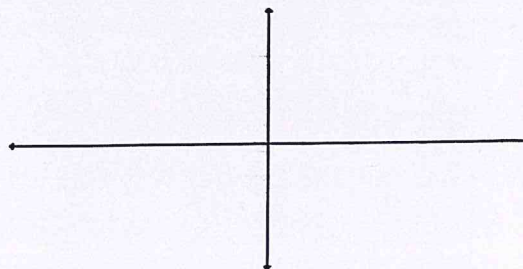
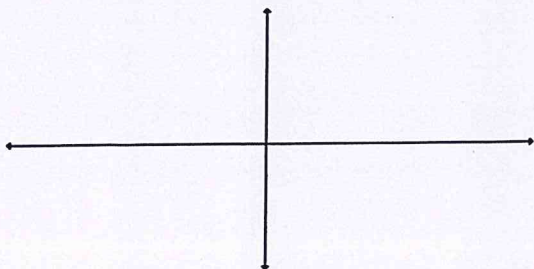


1. Sketch each function.

a) $y = -x(4-x)^3(x+3)^2(x+1)^2$

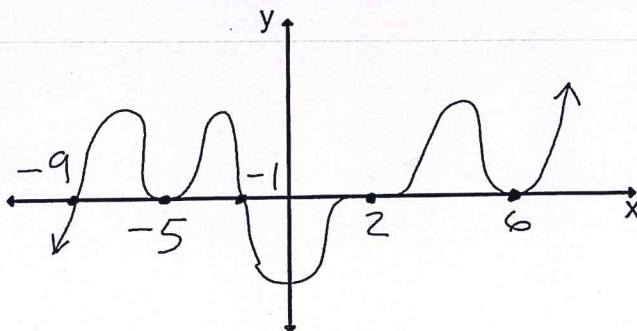
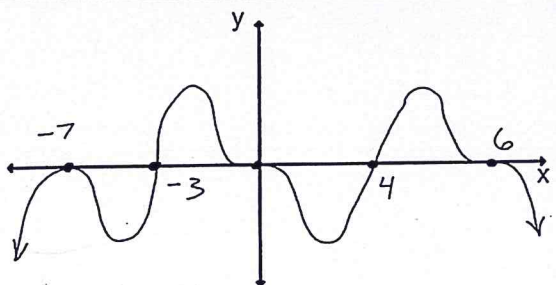
b) $y = x^2(x+6)^2(7-x)^3(x+3)^2$



2. Write a possible equation for each polynomial shown below.

a)

b)



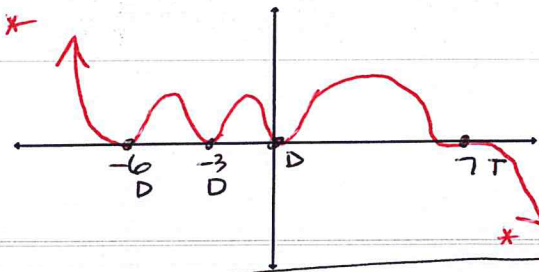
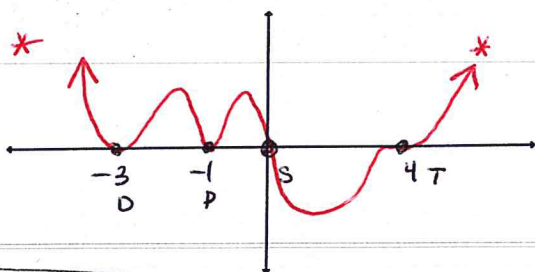
ANSWERS

1. Sketch each function.

a) $y = -x(4-x)^3(x+3)^2(x+1)^2$

b) $y = x^2(x+6)^2(7-x)^3(x+3)^2$

NEG
ODD ($\nwarrow, \searrow$)



Zeros: 0 single 4 triple -3 double -1 double

Zeros: 0 double -6 double 7 triple -3 double

2. Write a possible equation for each polynomial shown below.

a) $y = -x^3(x+7)^2(x+3)(x-4)(x-6)^3$

b) $y = (x+9)(x+5)^2(x+1)(x-2)^3(x-6)^2$

