

Name: ANSWER KEY

Score: _____

For the polynomial: $p(x) = -2(x-1)^2(x+2)(x-3)$

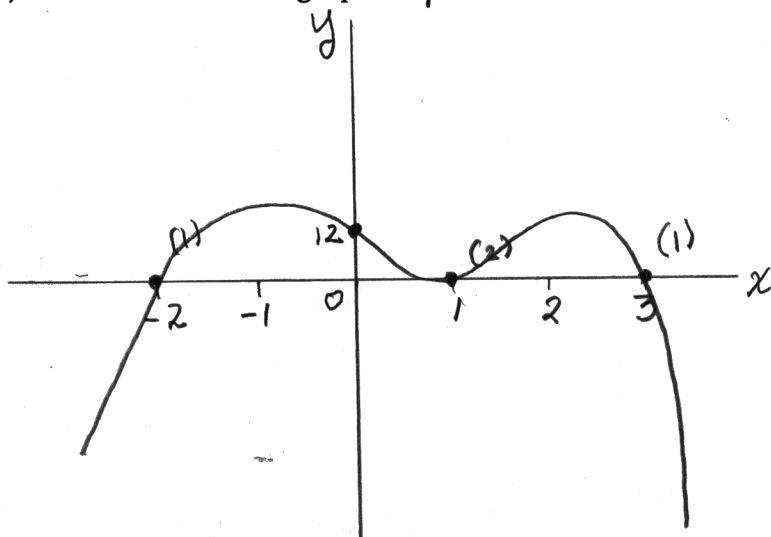
- a. (3) List the zeroes of
- r
- and their multiplicities.

Zero	Multiplicity
1	2
-2	1
3	1

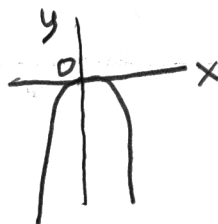
- b. (2) Approximate
- p
- by a power function.

$$p(x) \approx -2x^2 \cdot x \cdot x = \boxed{-2x^4}$$

- c. (5) Sketch a schematic graph of
- p
- .



$$p(0) = 12$$



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[ > p:=-2*(x-1)^2*(x+2)*(x-3);
```

$$p := -2(x-1)^2(x+2)(x-3)$$

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[ > plot(p,x=-4..4,color=black);
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