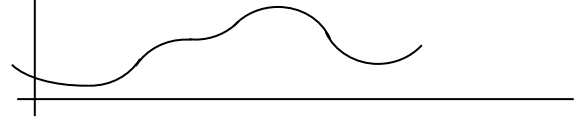


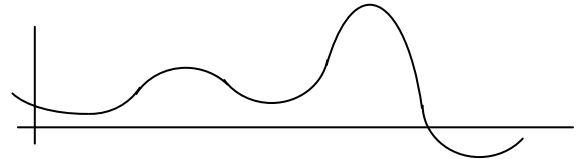
Polynomials

General Graphing

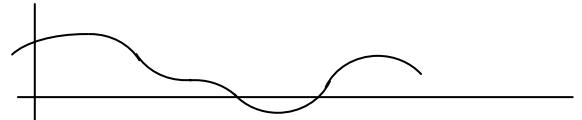
1. Give the minimum degree of this polynomial:



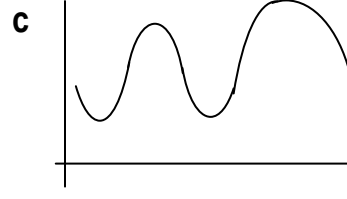
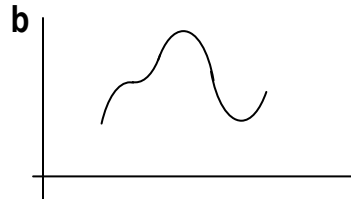
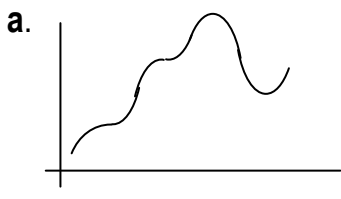
2. Give the minimum degree of this polynomial:



3. Give the minimum degree of this polynomial: _____.



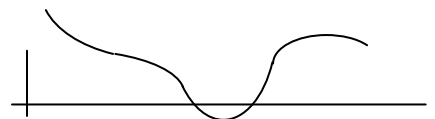
4. Give the minimum degree of each polynomial:



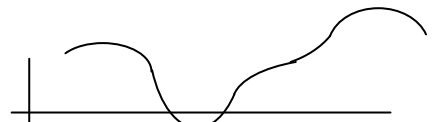
5. Give the minimum degree of this polynomial:



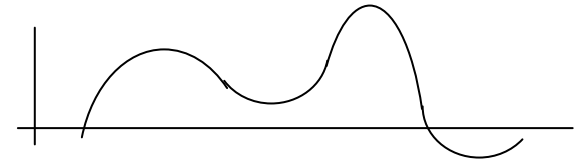
6. Give the minimum degree of this polynomial:



7. Give the minimum degree of this polynomial:



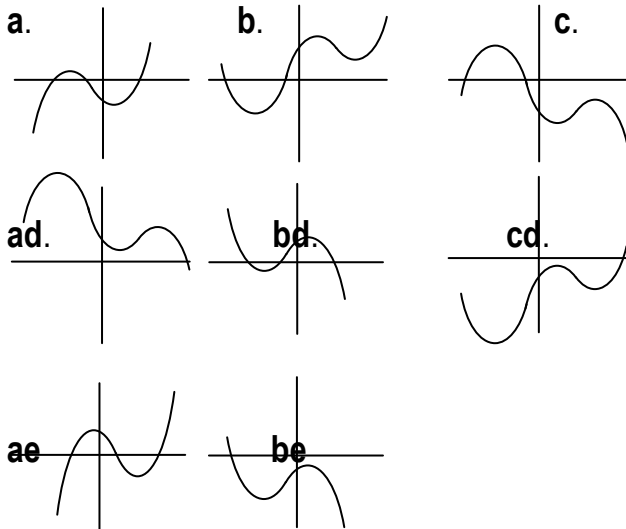
8. Give the minimum degree of this polynomial:



Polynomials General Graphing

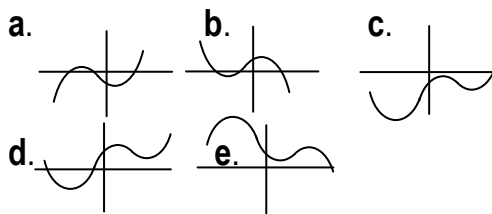
In #9 – 14 choose the best sketch for each polynomial based on end behavior, sign of the y-intercept and degree.

9.



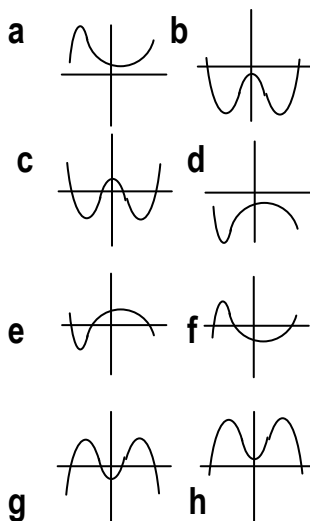
- $y(x) = 50x^4 - 70x^2 + 10$
- $y(x) = -50x^3 + 70x^2 + 10$
- $y(x) = -50x^4 - 70x^2 - 10$
- $y(x) = 50x^3 - 70x^2 - 10$
- $y(x) = -50x^4 - 70x^2 + 10$
- $y(x) = 50x^4 - 70x^2 - 10$
- $y(x) = 50x^3 + 70x^2 + 10$
- $y(x) = -50x^3 + 70x^2 - 10$

10. Match



- $y(x) = 50x^4 - 70x^2 + 10$
- $y(x) = -50x^3 + 70x^2 + 10$
- $y(x) = 50x^4 - 70x^2 - 10$
- $y(x) = 50x^3 - 70x^2 - 10$
- $y(x) = -50x^4 - 70x^2 + 10$

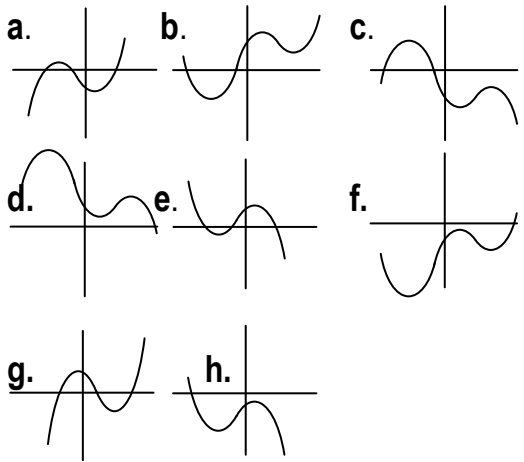
11. Match



- $y(x) = 50x^4 - 70x^2 + 100$
- $y(x) = 50x^4 - 70x^2 - 100$
- $y(x) = -50x^4 + 70x^2 + 100$
- $y(x) = -50x^4 + 70x^2 - 100$
- $y(x) = 50x^3 - 70x + 100$
- $y(x) = 50x^3 - 70x - 100$
- $y(x) = -50x^3 + 70x - 100$
- $y(x) = -50x^3 + 70x + 100$

Polynomials General Graphing

12. Match

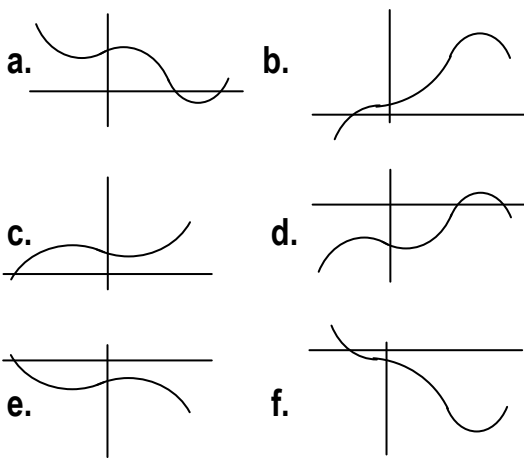


___ $y(x) = -50x^4 - 70x^2 - 10$

___ $y(x) = 50x^3 - 70x^2 - 10$

___ $y(x) = -50x^3 + 70x^2 - 10$

13. Match



___ $y = -37x^4 + 59x^2 + 193x - 4987$

___ $y = -37x^4 + 59x^3 + 193x + 4987$

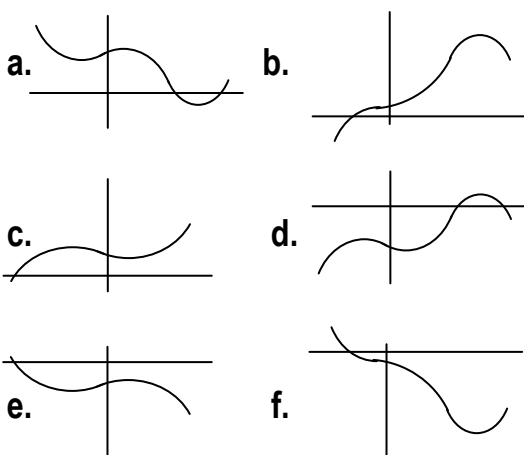
___ $y = 37x^4 - 59x^2 + 193x + 4987$

___ $y = 37x^4 - 59x^3 + 193x^2 - 498$

___ $y = -37x^3 + 59x^2 + 193x - 4987$

___ $y = 37x^3 - 59x^2 + 193x + 4987$

14. Match



___ $y = -37x^4 + 59x^3 + 193x + 4987$

___ $y = 37x^4 - 59x^3 + 193x^2 - 498$

___ $y = 37x^4 - 59x^2 + 193x + 4987$

___ $y = -37x^4 + 59x^2 + 193x - 4987$

___ $y = 37x^3 - 59x^2 + 193x + 4987$

___ $y = -37x^3 + 59x^2 + 193x - 4987$

Polynomials

General Graphing

Sketch the following functions. Plot and label the x-intercepts. Indicate the sign of the function between zeros, the behavior near each zero and the end behavior.

15. $f(x) = 1700(x - 1200)(x + 1500)^2$

16. $f(x) = 1700(x - 1200)^{23}(x + 1500)^{12}$

17. $f(x) = -1700(x - 1200)(x + 1500)^{52}$

18. $f(x) = 1700(x - 1200)^{12}(x + 1500)^{13}$

19. $f(x) = -1700(x - 1200)(x + 1500)^{22}(x + 1800)$

20. $f(x) = -1700(x - 1800)^{11}(x - 1200)(x + 1500)^2$

21. $f(x) = -1700(x - 1800)^{12}(x - 1200)(x + 1500)^{23}$

22. $f(x) = -1700(x - 1800)^{11}(x - 1200)^{23}(x + 1500)^2$

23. $f(x) = -1700(x - 1500)^{11}(x - 1200)^{26}(x + 1800)^2$

24. $f(x) = 1700(x - 1800)^{11}(x - 1500)(x + 1200)^2$

25. $f(x) = -1700(x - 1200)^{11}(x - 1500)(x + 1800)^2$

26. $f(x) = -1700(x - 1200)^{11}(x - 1800)(x + 1500)^2$

Answers:

1. 6

2. 6

3. 6

4. 7, 5, 5

5. 6

6. 5

7. 6

8. 5

9. Top to bottom: b, bd, c, a, ad, cd, ae, be

10. Top to bottom: d b c a e

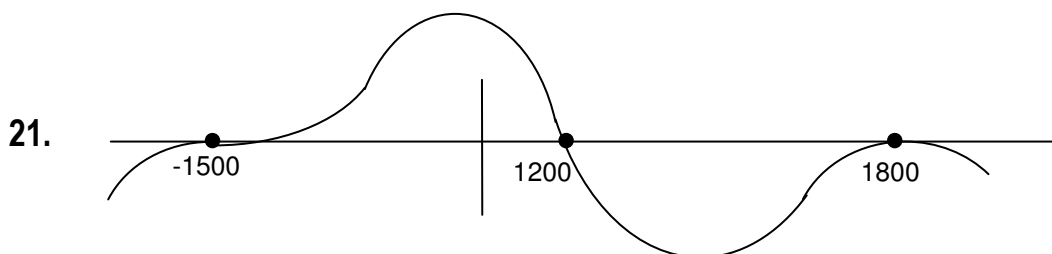
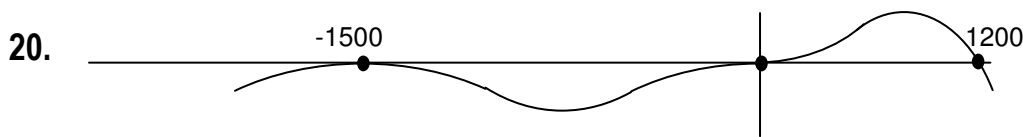
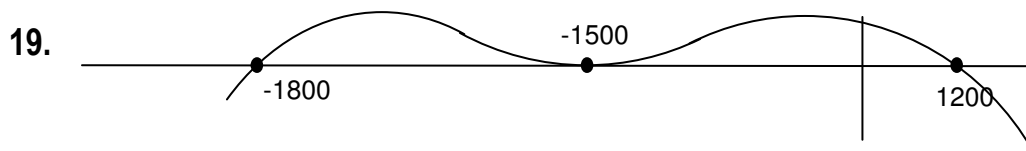
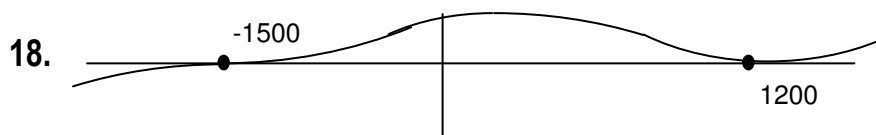
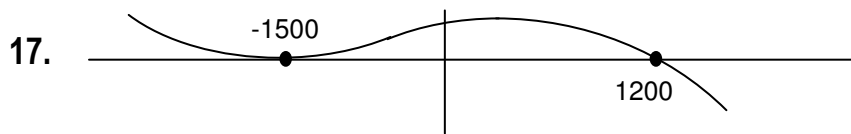
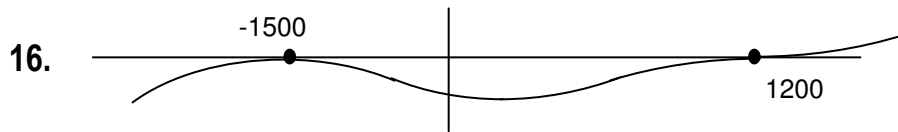
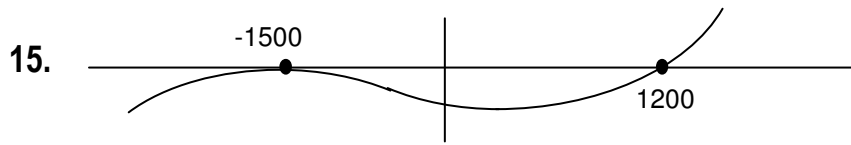
11. cbhgafde

12. cah

13. dbafec

14. bfade

Polynomials General Graphing



Polynomials General Graphing

