

Chapter 17 Review

Date _____ Period _____

Name each polynomial by degree and number of terms

1) $7 + 8n^2 - 4n^5$

2) -7

3) $-3n^4 + 6n$

4) $-8p^4y^2$

Rewrite in standard form. Identify the leading coefficient

5) $9v - 10v^3$

6) $3p^6 - 3p^2 - 10p^3 - 9p^5$

Simplify each sum.

7) $6x^4 - 5x^3 + 4x^2 + 8x^2 - 4x^4 - 4x$

8) $7x + 7x^3 + x^2 + 8x^2 + 7x^3 - 7x$

9) $(-2x + 7 - 7x^4) + (-7x - 6x^4 - 6)$

10) $(6n^2 + 4n^4 + 6n^3) + (5n^4 - n^3 + 8n^2)$

11) $(8n + 8n^4 - 7n^2) + (7n + 6n^4 - 6n^2) + (3n - 6n^2 - 6n^4)$

12) $(4n - 8n^2 + n^4) + (2n^4 - 5n - 6n^3) + (2n^2 + 2n - 5n^4)$

13) $(-m^4 - 8mn^3 - 3n) + (8n - mn^3 + 3m^4)$

14) $(6u^4 - 8u^4v^3 - 3u^4v^4) + (-8u^4 + 6u^4v^4 - 5u^4v^3)$

Simplify each difference.

15) $(-5x^4 - 7x^2 + 5) - (-x^2 - 6x + 5x^4)$

16) $(-m - 4m^3 - 7) - (-4 - 7m - 5m^3)$

17) $(-5n - 4n^2 + 1) - (6n - n^2 + 6)$

18) $(8n^2 - 7 - 2n^4) - (-6n^2 + 4n - 8n^4)$

19) $(-2uv^3 + 6v^4 - 7) - (v^4 - 4v + 1)$

20) $(-2x^2y^3 - 5x^4y^4 - 4x^2) - (7x^4y^4 + 4x^2y^3 - 5x^2)$

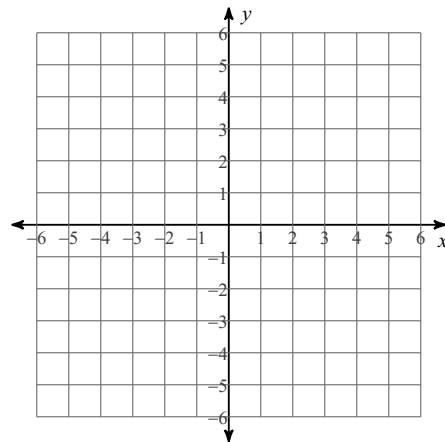
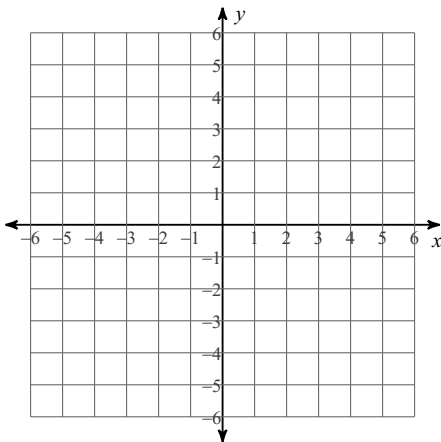
21) $(-8 - 3a^3 + 2a^2) - (7a^2 - 8a^3 - 2) - (-5a^3 - 5a^2)$

22) $(-7 - 2x - 4x^4) - (5 - 3x + 8x^4) - (3 - 2x^4)$

Graph each equation.

23) $y = |x - 4| - 4$

24) $y = -|x - 1|$



Solve each equation.

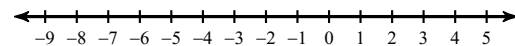
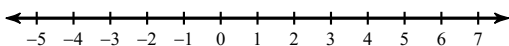
25) $-8|9n - 7| + 8 = 64$

26) $2|-4a + 8| + 3 = 59$

Solve each inequality and graph its solution.

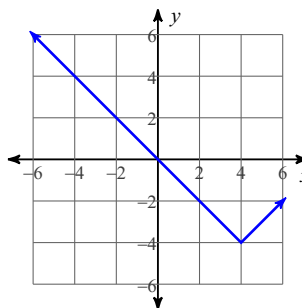
27) $-4|8n + 4| - 10 < -58$

28) $|9x + 9| + 3 \leq 48$

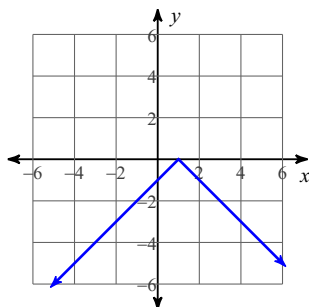


Answers to Chapter 17 Review (ID: 1)

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|---|-------------------------------|---------------------------------|
| 1) fifth degree trinomial | 2) constant monomial | 3) fourth degree binomial |
| 4) fourth degree monomial | 5) $-10v^3 + 9v$ L.C = -10 | |
| 6) $3p^6 - 9p^5 - 10p^3 - 3p^2$ L.C = 3 | 7) $2x^4 - 5x^3 + 12x^2 - 4x$ | |
| 8) $14x^3 + 9x^2$ | 9) $-13x^4 - 9x + 1$ | 10) $9n^4 + 5n^3 + 14n^2$ |
| | | 11) $8n^4 - 19n^2 + 18n$ |
| 12) $-2n^4 - 6n^3 - 6n^2 + n$ | 13) $2m^4 - 9mn^3 + 5n$ | 14) $3u^4v^4 - 13u^4v^3 - 2u^4$ |
| 15) $-10x^4 - 6x^2 + 6x + 5$ | 16) $m^3 + 6m - 3$ | 17) $-3n^2 - 11n - 5$ |
| 18) $6n^4 + 14n^2 - 4n - 7$ | 19) $-2uv^3 + 5v^4 + 4v - 8$ | 20) $-12x^4y^4 - 6x^2y^3 + x^2$ |
| 21) $10a^3 - 6$ | 22) $-10x^4 + x - 15$ | 23) |



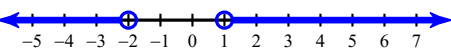
24)



25) No solution.

26) $\{-5, 9\}$

27) $n > 1$ or $n < -2$:



28) $-6 \leq x \leq 4$:

