Summing Like Terms
Lecture 013 Algebra WS #1 v01

Name_____ Date_____

Add the polynomials.

1) $(-3x - 3) + (5x - 18)$

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

3) $(7y^5 - 9y^4) + (4y^5 - 9y^4)$

4) $(7x^6 + 4x^3 + 6) + (3x^6 + 4x^3 - 9)$

5) $(6y^6 - 2y^3 + 7y) + (5y^6 - 4y^3 - 9y)$

6) $(-3x^3 + 4x + 5) + (9x^2 + 3x - 7)$

7) $\left(-\frac{2}{3}x^2 - \frac{2}{5}x + \frac{1}{2}\right) + \left(\frac{4}{5}x^2 + \frac{1}{4}x + \frac{1}{5}\right)$

Use a vertical format to add the polynomials.

8) $5x^5 + 4x^3$
$\underline{5x^5 + 4x^3}$

9) $3y^6 + 9y^4 - 7$
$\underline{2y^6 + 9y^4 - 2}$

10) $6x^4 + 5x^3 + 3x^2 + 9$
$\underline{5x^4 - 7x^3 - 5x^2 + 7}$

11) $2y^5 - 2y^4$
$\underline{5y^5 - 7y^4}$

12) $3x^6 + 7x^3 - 3x$
$\underline{8x^6 + 4x^3 + 6x}$

13) $-\frac{3}{4}x^2 - \frac{1}{2}x - \frac{3}{5}$
$\underline{-\frac{1}{5}x^2 + \frac{2}{3}x - \frac{1}{3}}$

14) $-\frac{2}{3}x^2 + \frac{1}{5}x - \frac{2}{3}$
$\underline{-\frac{2}{5}x^2 - \frac{2}{3}x - \frac{3}{4}}$

15) $-\frac{3}{4}x^2 + \frac{1}{3}x - \frac{3}{5}$
$\underline{-\frac{1}{3}x^2 + \frac{2}{5}x - \frac{1}{5}}$

16) $9x^3 + 2x + 2$
$\underline{6x^2 + 6x + 2}$

Answer Key
Testname: 013ALGEBRAWS#01V01

1) $2x - 21$
2) $3x^2 - 8x + 11$
3) $11y^5 - 18y^4$
4) $10x^6 + 8x^3 - 3$
5) $11y^6 - 6y^3 - 2y$
6) $-3x^3 + 9x^2 + 7x - 2$
7) $\frac{2}{15}x^2 - \frac{3}{20}x + \frac{7}{10}$
8) $10x^5 + 8x^3$
9) $5y^6 + 18y^4 - 9$
10) $11x^4 - 2x^3 - 2x^2 + 16$
11) $7y^5 - 9y^4$
12) $11x^6 + 11x^3 + 3x$
13) $-\frac{19}{20}x^2 + \frac{1}{6}x - \frac{14}{15}$
14) $-\frac{16}{15}x^2 - \frac{7}{15}x - \frac{17}{12}$
15) $-\frac{13}{12}x^2 + \frac{11}{15}x - \frac{4}{5}$
16) $9x^3 + 6x^2 + 8x + 4$