

5.6 Long Division of Polynomials DAY ONE CYU

Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
H Use when you could do it alone with a little help from teacher or peer
G Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Long Division with polynomial functions	1 - 4	5 - 8	9 - 12

Use long division to complete the division problems below. Show all work to earn full credit.

1. $\frac{12x^4 + 3x^2}{x}$

$12x^3 + 3x$

2. $\frac{15x^2 - 9x^5}{x}$

$15x - 9x^4$
 or
 $\boxed{-9x^4 + 15x}$
 better

3. $\frac{20x^3 - 30x^2 + 5x + 5}{5}$

$4x^3 - 6x^2 + x + 1$

4. $\frac{8x^3 - 4x^2 + 6x + 2}{2}$

$4x^3 - 2x^2 + 3x + 1$

5. $\frac{15p^3 + 18p^2}{3p}$

$5p^2 + 6p$

6. $\frac{14m^2 - 27m^3}{7m}$

$2m - \frac{27m^2}{7}$

$$7. \frac{-9x^4 + 18x^5}{6x^5}$$

$$-\frac{3}{2x} + 3$$

$$8. \frac{6x^5 + 3x^4}{3x^4}$$

$$2x + 1$$

$$9. \frac{-9x^5 + 3x^4 - 12}{3x^3}$$

$$-3x^2 + x - \frac{4}{x^3}$$

$$10. \frac{6a^2 - 2a + 12}{-2a^2}$$

$$-3 + \frac{2}{a} - \frac{6}{a^2}$$

$$11. \frac{4x^4 - 6x^3 + 7}{-4x^4}$$

$$-1 + \frac{3}{2x} - \frac{7}{4x^4}$$

$$12. \frac{-12a^3 + 36a - 15}{3a}$$

$$-4a^2 + 12 - \frac{5}{a}$$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

