

5.7 Synthetic 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
Synthetic Division with polynomial functions	1 - 4	5, 6, 9, 10, 12	7, 8, 11

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

1. $(x^2 + 3x - 40) \div (x - 5)$

$x + 8$

2. $(x^2 - 14x + 24) \div (x - 2)$

$x - 12$

3. $(x^2 + 5x - 6) \div (x + 6)$

$x - 1$

4. $(x^2 + 12x + 32) \div (x + 4)$

$x + 8$

5. $(x^3 - 7x^2 - 13x + 5) \div (x - 2)$

$x^2 - 5x - 23 - \frac{41}{x-2}$

6. $(x^3 + 6x^2 + 4x - 7) \div (x + 5)$

$x^2 + x - 1 - \frac{2}{x+5}$

7. $(4x^2 - 9) \div (x - 2)$

$$4x + 8 + \frac{7}{x-2}$$

8. $(3x^2 - 4) \div (x - 1)$

$$3x + 3 - \frac{1}{x-1}$$

9. $(2x^4 - 13x^3 + 16x^2 - 9x + 20) \div (x - 5)$

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

10. $(3x^4 + 5x^3 - x^2 + x - 2) \div (x + 2)$

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

11. $(3x^2 - 15) \div (x + 3)$

$$3x - 9 + \frac{12}{x+3}$$

12. $(3x^2 + 7x - 6) \div (x + 4)$

$$3x - 5 + \frac{14}{x+4}$$

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.

