## 5.7 Synthetic Division of Polynomials DAY ONE CYU

☑ Use when you get it right all by yourself

 ${m S}$  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)

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

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

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

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

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

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

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

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

9. 
$$(2x^4 - 13x^3 + 16x^2 - 9x + 20) \div (x - 5)$$
 10.  $(3x^4 + 5x^3 - x^2 + x - 2) \div (x + 2)$ 

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

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

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

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.

