Name $\qquad$ Date $\qquad$ Pd $\qquad$

### 5.7 Synthetic Division of Polynomials DAY ONE CYU

$\square$ Use when you get it right all by yourself
$\boldsymbol{S}$ Use when you did it all by yourself, but made a silly mistake $\boldsymbol{H}$ Use when you could do it alone with a little help from teacher or peer
$\boldsymbol{G}$ 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. $\left(x^{2}+3 x-40\right) \div(x-5)$
2. $\left(x^{2}-14 x+24\right) \div(x-2)$
3. $\left(x^{2}+5 x-6\right) \div(x+6)$
4. $\left(x^{2}+12 x+32\right) \div(x+4)$
5. $\left(x^{3}-7 x^{2}-13 x+5\right) \div(x-2)$
6. $\left(x^{3}+6 x^{2}+4 x-7\right) \div(x+5)$
7. $\left(4 x^{2}-9\right) \div(x-2)$
8. $\left(3 x^{2}-4\right) \div(x-1)$
9. $\left(2 x^{4}-13 x^{3}+16 x^{2}-9 x+20\right) \div(x-5)$
10. $\left(3 x^{2}-15\right) \div(x+3)$
11. $\left(3 x^{4}+5 x^{3}-x^{2}+x-2\right) \div(x+2)$
12. $\left(3 x^{2}+7 x-6\right) \div(x+4)$

## Rate your mastery leve!!

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


Basic


