## The Weekly Rigor

No. 346

"A mathematician is a machine for turning coffee into theorems."

February 6, 2021

## 40 Problems in Dividing a Polynomial by a Polynomial Using Synthetic Division

(Part 5)

33.  $\frac{x^4 - c^4}{x - c}$ .

34.  $\frac{x^4 - c^4}{x + c}$ .

35.  $\frac{x^5-c^5}{x-c}$ .

36.  $\frac{x^5+c^5}{x+c}$ .

37. 
$$\frac{x^6 - c^6}{x - c}$$
.

38. 
$$\frac{x^6 - c^6}{x + c}$$

39. 
$$\frac{x^7 - c^7}{x - c}$$
.

$$40. \ \frac{x^7 + c^7}{x + c}.$$

"Only he who never plays, never loses."

Written and published every Saturday by Richard Shedenhelm

WeeklyRigor@gmail.com