## The Weekly Rigor

No. 336

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

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## 20 Problems in Dividing a Polynomial by a Polynomial

(Part 1)

PROBLEMS

Perform the indicated division, using long division.

1.  $\frac{a^2+2ab+b^2}{a+b}$ .

2.  $\frac{a^3 + 2a^2b + 2ab^2 + b^3}{a+b}$ .

3. 
$$\frac{a^3+x^3}{a+x}$$
.

 $4. \ \frac{x^3 - y^3}{x - y}.$ 

"Only he who never plays, never loses." Written and published every Saturday by Richard Shedenhelm

WeeklyRigor@gmail.com