The Weekly Rigor

No. 342

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

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

(Part 1)

PROBLEMS

Use synthetic division to determine the quotient and remainder. (Include the quotient written out as a polynomial.)

1. $\frac{x^2 + x - 6}{x - 2}$.

2. $\frac{3x^2 - 2x - 8}{x - 2}$.

3.
$$\frac{3x^2 - 10x + 8}{x - 2}$$

4.
$$\frac{3x^2+2x-8}{x+2}$$

5.
$$\frac{3x^2 - 2x - 7}{x - 2}$$
.

6.
$$\frac{3x^2 - 12}{x - 2}$$
.

7.
$$\frac{3x^2-10}{x-2}$$
.

8.
$$\frac{x^2+9x+18}{x+3}$$
.

"Only he who never plays, never loses."

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