

## Assignment:

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Use synthetic substitution to evaluate the polynomial for the given value.

8.  $P(x) = 2x^3 - 9x^2 + 27$  for  $x = 2$

9.  $P(x) = x^2 - x - 30$  for  $x = -8$

10.  $P(x) = 3x^3 + 5x^2 + 4x + 2$  for  $x = \frac{1}{3}$

11.  $P(x) = 3x^5 + 4x^2 + x + 6$  for  $x = -1$

Use synthetic substitution to evaluate the polynomial for the given value.

25.  $P(x) = 2x^2 - 5x - 3$  for  $x = 4$

26.  $P(x) = 4x^3 - 5x^2 + 3$  for  $x = -1$

27.  $P(x) = 3x^3 - 5x^2 - x + 2$  for  $x = -\frac{1}{3}$

28.  $P(x) = 25x^2 - 16$  for  $x = \frac{4}{5}$