

## Class Review for Chapter 2, Part 2

Find the zeros of the function.

<p>1. <math>y = x^2 + 3x + 2</math></p> <p>Factored Form:</p>	<p>2. <math>y = 9 - x^2</math></p> <p>Factored Form:</p>	<p>3. <math>2x^2 - 4x + 11</math></p> <p>Factored Form:</p>
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4. Equation:

$$f(x) = -2x(x + 1)(x - 3)$$

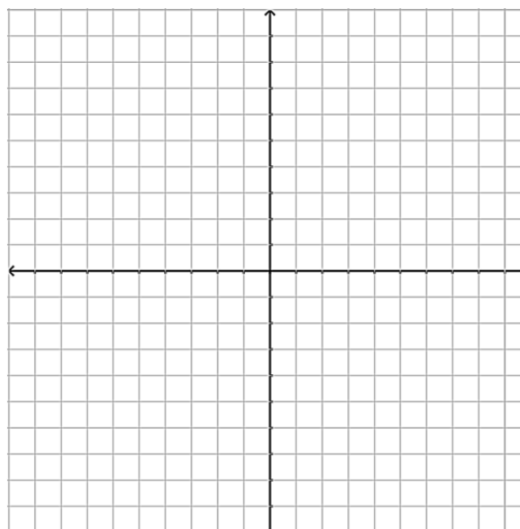
Equation in standard form:

Zeros:

y-intercept:

End Behavior:

$$\begin{aligned} \text{As } x \rightarrow \infty, f(x) &\rightarrow \underline{\hspace{2cm}} \\ \text{As } x \rightarrow -\infty, f(x) &\rightarrow \underline{\hspace{2cm}} \end{aligned}$$



5. Equation:  $f(x) = x^3 + 3x^2 + 2x$

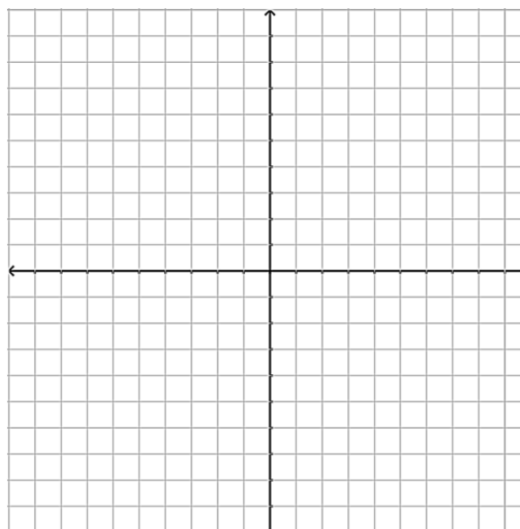
Equation in factored form:

Zeros:

y-intercept:

End Behavior:

$$\begin{aligned} \text{As } x \rightarrow \infty, f(x) &\rightarrow \underline{\hspace{2cm}} \\ \text{As } x \rightarrow -\infty, f(x) &\rightarrow \underline{\hspace{2cm}} \end{aligned}$$



6. Equation:  $f(x) = x^4 - 16$

Equation in factored form:

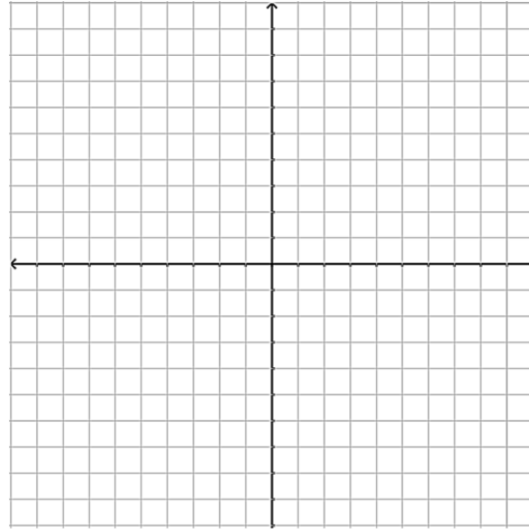
Zeros:

y-intercept:

End Behavior:

$As x \rightarrow \infty, f(x) \rightarrow \underline{\hspace{2cm}}$

$As x \rightarrow -\infty, f(x) \rightarrow \underline{\hspace{2cm}}$



7. Equation:  $f(x) = x^3 - 8$

Equation in factored form:

Zeros:

y-intercept:

End Behavior:

$As x \rightarrow \infty, f(x) \rightarrow \underline{\hspace{2cm}}$

$As x \rightarrow -\infty, f(x) \rightarrow \underline{\hspace{2cm}}$

