King Abdulaziz University

2.3 Calculating Limits Using Limit Laws

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تعليمات: لترى محتويات الصفحة و لتنتقل الى الصفحة التالية انقر على ◄. قد تحتاج لنقر اكثر من مرة

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EXAMPLE 4. Evaluate the following limits $\lim_{x \to 0} \frac{\sqrt{x+1}-1}{x}$

Solution:

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EXAMPLE 5. Evaluate the following limits $\lim_{x\to 3} \frac{x^2 + x - 12}{\sqrt{x+1} - 2}$

Solution:

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EXAMPLE 6. Let
$$f(x) = \begin{cases} \frac{x^3 - 27}{x - 3}, & \text{if } x < 3; \\ 27, & \text{if } x = 3; \\ \frac{x^2 + 21x - 72}{x - 3}, & \text{if } x > 3. \end{cases}$$

Find $\lim_{x \to 3} f(x)$

Solution:

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