1. **[–/1.25 Points]**   **DETAILS**   SCALCET9 5.3.009.

Use part one of the fundamental theorem of calculus to find the derivative of the function.

$$g(x) = \int_0^x \sqrt{t^3 + t^5}\, dt$$

$g'(x) = $

Need Help?   [Watch It]

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2. **[–/1.25 Points]**   **DETAILS**   SCALCET9 5.XP.3.008.

Use part one of the fundamental theorem of calculus to find the derivative of the function.

$$g(s) = \int_6^s (t - t^5)^3\, dt$$

$g'(s) = $

Need Help?   [Watch It]

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3. **[–/1.25 Points]**   **DETAILS**   SCALCET9 5.3.025.

Evaluate the integral.

$$\int_7^9 (x^2 + 2x - 4)\, dx$$

Need Help?   [Watch It]

4. [–/1.25 Points]   **DETAILS**   SCALCET9 5.3.029.

Evaluate the integral.

$$\int_1^4 \sqrt{x}\ dx$$

Need Help?   [Watch It]

5. [–/1.25 Points]   **DETAILS**   SCALCET9 5.3.036.

Evaluate the integral.

$$\int_0^4 (5 - t)\sqrt{t}\ dt$$

6. [–/1.25 Points]   **DETAILS**   SCALCET9 5.3.045.

Evaluate the integral.

$$\int_1^2 \frac{v^4 + 4v^8}{v^5}\ dv$$

Need Help?   [Watch It]

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7. [–/1.25 Points]   **DETAILS**   SCALCET9 5.3.069.

Find the derivative of the function.

$$F(x) = \int_x^{x^2} e^{t^7} dt$$

$F'(x) =$

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[ ]

Need Help?   [Watch It]

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8. [–/1.25 Points]   **DETAILS**   SCALCET9 5.XP.3.015.MI.

Evaluate the integral.

$$\int_0^1 \left(3 + \frac{1}{2}u^4 - \frac{2}{3}u^9 \right) du$$

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[ ]

Need Help?   [Master It]

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9. [–/1.25 Points]   **DETAILS**   SCALCET9 5.XP.3.025.

Evaluate the integral.

$$\int_0^{\pi/4} 6 \sec^2(t) \, dt$$

[ ]

[ ]

Need Help?   [Watch It]

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10. [–/1.25 Points]   **DETAILS**   SCALCET9 5.XP.3.024.MI.NVA

Evaluate the integral.

$$\int_0^{\pi/4} 5 \sec(\theta) \tan(\theta) \, d\theta$$

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Need Help?   [Master It]

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11. [–/1.25 Points]   **DETAILS**   SCALCET9 5.XP.3.026.

Evaluate the integral.

$$\int_2^4 \frac{4 + u^2}{u^3} \, du$$

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12. [–/1.25 Points]   **DETAILS**   SCALCET9 5.XP.3.017.

Evaluate the integral.

$$\int_1^5 \frac{1}{7x} \, dx$$

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