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☐7 ☐7 ☐7 ☐7 ☐7 ☐7 ☐7 ☐7
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← Please encode your student number, and write your first and last names below.

First name and last name:

Questions with a ♣ may have zero, one or more right answers.

Question [pdiff01] Evaluate $\frac{\partial z}{\partial x}$ of $z = -4y^3 - 7xy^2 - 2x^2y + 3x^3$.

- ☒ $-7y^2 - 4xy + 9x^2$ ☐ $-7y^2 - 2y + 6x^2$ ☐ $9x^2 - 9y$
☐ $-7y^2 - 2y + 3x^2$ ☐ $-7y^2 - 2y$

Question [pdiff02]

Evaluate $\frac{\partial z}{\partial y}$ of $z = -4y^3 - 7xy^2 - 2x^2y + 3x^3$.

- ☒ $-12y^2 - 14xy - 2x^2$ ☐ $-7xy^2 - 4y^2 - 4y - 2x^2$
☐ $-4y^2 - 14xy - 4y - 2x$ ☐ $-4y^2 + 14xy - 4y - 2x^2$ ☐ $-14xy - 8y - 2x^2$

Question [pdiff03]

Evaluate f_x of $z = e^{6y-4x}$.

- ☒ $-4e^{6y-4x}$ ☐ $-3e^{6y-3x}$ ☐ $-4e^{5y-4x}$ ☐ e^{6y-4x} ☐ $\frac{3e^{6y-3x}}{4}$

Question [pdiff04]

Evaluate f_y of $z = e^{6y-4x}$.

- ☒ $6e^{6y-4x}$ ☐ $6e^{6y-3x}$ ☐ $5e^{5y-4x}$ ☐ e^{6y-4x} ☐ e^{6y-3x}

Question [pdiff05]

Evaluate z_x of $z = \frac{3x-9y}{3y+2x}$.

- ☒ $\frac{27y}{(3y+2x)^2}$ ☐ $-\frac{9y}{(3y+2x)^2}$ ☐ $\frac{27y}{3y+2x}$ ☐ $\frac{27x}{(3y+2x)^2}$ ☐ $-\frac{9x}{3y+2x}$

Question [pdiff06]

Evaluate z_y of $z = \frac{3x-9y}{3y+2x}$.

- ☒ $-\frac{27x}{(3y+2x)^2}$ ☐ $\frac{27x}{(3y+2x)^2}$ ☐ $-\frac{27y}{3y+2x}$ ☐ $-\frac{9x}{(3y+2x)^2}$ ☐ $\frac{27x}{3y+2x}$