

(1) [Var. 1] Compute  $\frac{d}{dt} (2t + \cos(t))$ . Sol:  $-\sin(t) + 2$

[Var. 2] Compute  $\frac{d}{dt} (2t + \sin(t))$ . Sol:  $\cos(t) + 2$

[Var. 3] Compute  $\frac{d}{dt} (2t + e^t)$ . Sol:  $e^t + 2$

[Var. 4] Compute  $\frac{d}{dt} t^2$ . Sol:  $2t$

[Var. 5] Compute  $\frac{d}{dt} (3t + \cos(t))$ . Sol:  $-\sin(t) + 3$

[Var. 6] Compute  $\frac{d}{dt} (3t + \sin(t))$ . Sol:  $\cos(t) + 3$

[Var. 7] Compute  $\frac{d}{dt} (3t + e^t)$ . Sol:  $e^t + 3$

[Var. 8] Compute  $\frac{d}{dt} (t^2 + t)$ . Sol:  $2t + 1$

[Var. 9] Compute  $\frac{d}{dt} (4t + \cos(t))$ . Sol:  $-\sin(t) + 4$

[Var. 10] Compute  $\frac{d}{dt} (4t + \sin(t))$ . Sol:  $\cos(t) + 4$

[Var. 11] Compute  $\frac{d}{dt} (4t + e^t)$ . Sol:  $e^t + 4$

[Var. 12] Compute  $\frac{d}{dt} (t^2 + 2t)$ . Sol:  $2t + 2$

[Var. 13] Compute  $\frac{d}{dt} (5t + \cos(t))$ . Sol:  $-\sin(t) + 5$

[Var. 14] Compute  $\frac{d}{dt} (5t + \sin(t))$ . Sol:  $\cos(t) + 5$

[Var. 15] Compute  $\frac{d}{dt} (5t + e^t)$ .

Sol:  $e^t + 5$

[Var. 16] Compute  $\frac{d}{dt} (t^2 + 3t)$ .

Sol:  $2t + 3$

