Test (60) Review ANSWERS

51. A) $(3x^2+6)^5+C$ B) $\cos^4 t+C$ C) $\sqrt{2x^3+4}+C$

D) $e^{4\sin x}+C$ E) $\ln\left|3x^4+3x\right|+C$

52.

53. A) B)

54. A) $x(4)=38\,\text{units}$ $v(4)=20\,\text{units/sec}$ $a(4)=6\,\text{units/sec}^2$

B)

55. A) B) C)

56. A) $-\frac{1}{4}\cos 4t+C$ B) $\frac{1}{24}(3x^2+2)^4+C$ C) $\frac{1}{3}\sqrt{3x^2+2}+C$

D) $\frac{1}{12}\sin^4(3t)+C$ E) $-\frac{1}{2}e^{\cos(2t)}+C$ F) $\frac{1}{3}\ln\left|x^3+3x\right|+C$

57. A) $\int_c^c f(x)dx=0$ B) $\int_a^b f(x)dx=-\int_b^a f(x)dx$

C) $\int_a^d f(x)dx+\int_d^k f(x)dx=\int_a^k f(x)dx$

D) E)

58. A) B)

C) D)

59. A) $\frac{253}{12}\,\text{units}^2\approx 21.0833\,\text{units}^2$ B) C)

60. A) $\frac{4}{15}\,\text{units}^2\approx 0.2667\,\text{units}^2$ B) C)