

$$\frac{+26}{26}$$

10/10 (a) This is a polynomial. +1

$$\text{degree} = \underline{3} +1$$

$$\text{leading term} = \underline{-t^3} +1$$

$$\text{leading coeff.} = \underline{-1} +1$$

(b) Not a polynomial, (e^t) . +2

(c) This is a polynomial. +1

$$\text{degree} = \underline{100} +1$$

$$\text{leading term} = \underline{4n^{100}} +1$$

$$\text{leading coeff} = \underline{4} +1$$

(2) (a) As $x \rightarrow \infty$, $s(x) \rightarrow -\infty$ +2
8/8

(b/c leading term is $-32x^6$).

(b) As $t \rightarrow \infty$, $u(t) \rightarrow \infty$ +2

(leading term is $+t^4$)

(c) As $t \rightarrow \infty$, $f(t) \rightarrow -\infty$ +2

(leading term $-t^3$)

(d) As $t \rightarrow \infty$, $f(t) \rightarrow -\infty$ +2

(leading term is $-t^4$)

* Write entire portion for full credit.
(If just the answer, give half credit.)

③

8/8

a) $ARC = \frac{R(9) - R(0)}{9 - 0} = \frac{3.327 - 1.95}{9}$

$= \frac{0.153}{1} \frac{\%}{\text{year}}$

+2

+2

b) $R(t)$ is an upward quadratic.

Minimum occurs at

$t_{\text{vert}} = \frac{-b}{2a} = 0$ ($b=0$)

+2

Minimum is

$R_{\text{vert}} = \underline{R(0) = 1.95 \%}$

+2