

## Assignment 1 Solution

(1)

- a)  $x = 8$
- b)  $x = 1/16$
- c)  $x = 2$
- d)  $x = 25$
- e)  $x = 2/3$

(2)

- a)  $2x - 4y$
- b)  $\frac{x+4y}{2x+1}$

(3)

- a)  $s(t) = 1.5 \sin(4t) + 4 \sin(t)$
- b)

	$1.5 \sin(4t)$	$4 \sin(t)$
A	$3/2 \text{ V}$	$4 \text{ V}$
f	$2/\pi \text{ Hz}$	$1/2\pi \text{ Hz}$
$\Theta$	$0 \text{ rad}$	$0 \text{ rad}$

- c) and d) see next page

(4)

- a)  $C = 1.58 \text{ kbps}$
- b)  $C = 30.1 \text{ kbps}$

(5)  $8.47 \text{ km/hr}$

(3c) and (3d)

