

4.1.4  
HWK

4-37)

a)

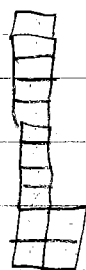
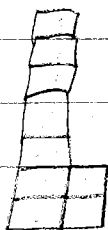


fig 0

fig 1

fig 2

fig 3

b) growth factor is 4

| fig # | # of tiles |
|-------|------------|
| 0     | 5 ↓ +4     |
| 1     | 9 ↓ +4     |
| 2     | 13 ↓ +4    |
| 3     | 17 ↓ +4    |

c)  $y = 4x + 5$

3-38)

Fig 0 has 7 tiles.

Fig 1 has 9 tiles.

Growth factor is 2

Rule is  $y = 2x + 7$

3-39)

$$a) 3x - 6 + 1 = -2x - 5 + 5x$$

$$3x - 5 = 3x - 5$$

All numbers

$$b) -2x - 5 = 2 - 4x - (x - 1)$$

$$-2x - 5 = 2 - 4x - x + 1$$

$$-2x - 5 = 3 - 5x$$

$$+5 \quad +5$$

$$-2x = 8 - 5x$$

$$+5x \quad +5x$$

$$\frac{3x}{3} = \frac{8}{3} \quad x = \frac{8}{3}$$

$$\begin{array}{r}
 4-40) \quad 5-2x = -1 \\
 \underline{-5 \qquad -5} \\
 -2x = -6 \\
 \underline{-2 \quad -2} \\
 x = 3
 \end{array}$$

4-41)

|         |   |    |    |     |    |     |     |     |      |
|---------|---|----|----|-----|----|-----|-----|-----|------|
| (in) x  | 2 | 10 | 5  | -5  | 4  | -3  | 1.5 | 50  | x    |
| (out) y | 4 | 28 | 13 | -17 | 10 | -11 | 2.5 | 148 | 3x-2 |

multiply x by 3 and subtract 2

|     |      |
|-----|------|
| x   | y    |
| -5  | -17  |
| -3  | -11  |
| 1.5 | 2.5  |
| 2   | 4    |
| 4   | 10   |
| 5   | 13   |
| 10  | 28   |
| 50  | 148  |
| x   | 3x-2 |