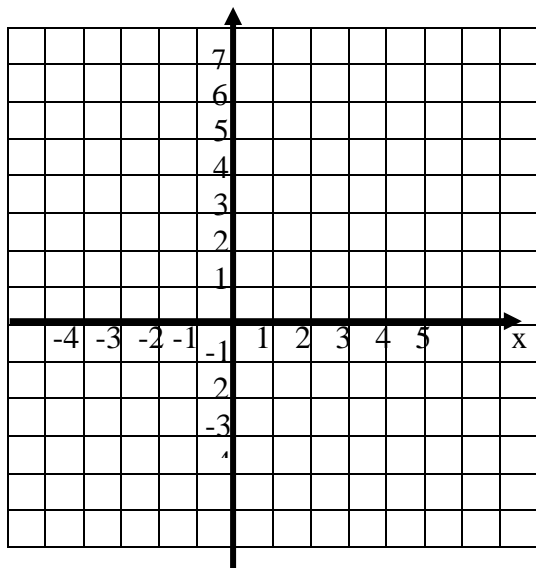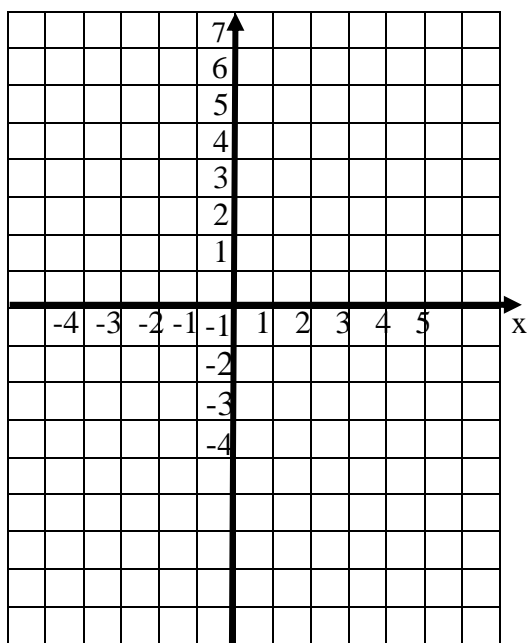## Y 12 :   "PIECES" OF GRAPHS.

1(a) Draw $y = x + 1$ just for x values less than or equal to 2   (ie $x \leq 2$)
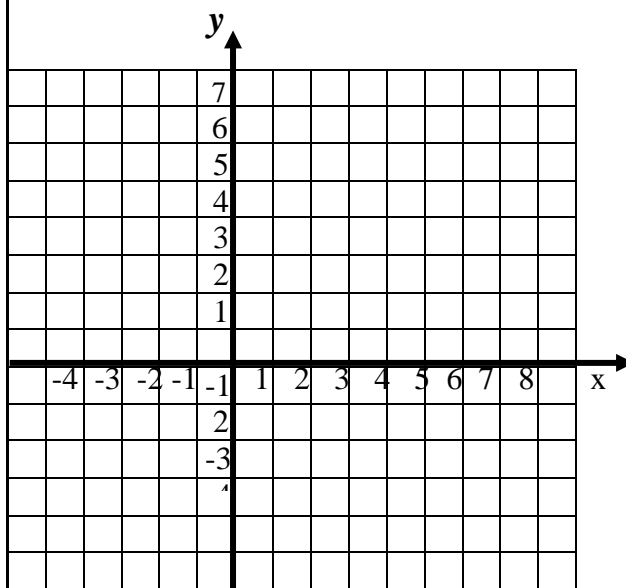

(b) Draw $y = 5 - x$ just for x values ≥ 2 and draw this on the above grid.

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2.(a) On the grid below, draw part of the graph of $y = \frac{1}{2}x - 2$ for all x values which are less than or equal to 4 ie $x \leq 4$
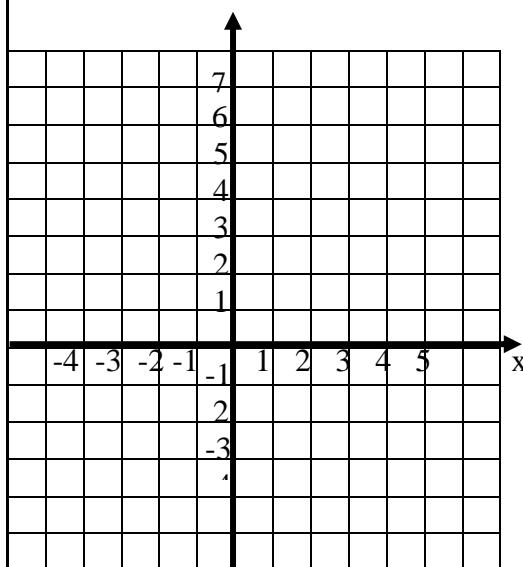

(b) Draw part of the graph $y = x - 4$ just for $x \geq 4$ and draw this on the above grid.

3. Draw $y = 2$ for $x \leq 0$ and on the same grid draw $y = -\frac{1}{2}x + 2$ for $x \geq 0$
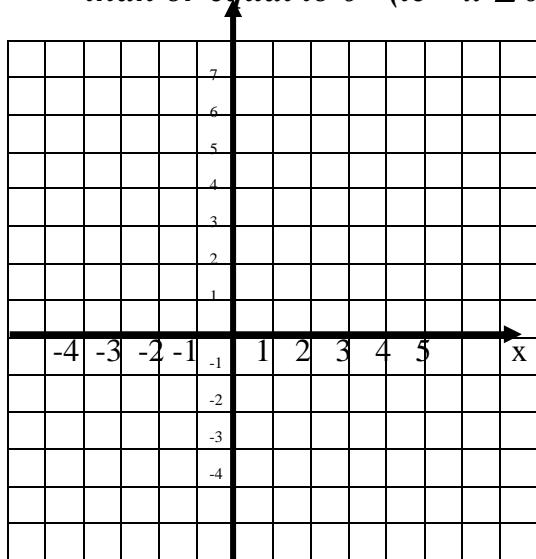

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4. On the grid below, draw part of the graph of $y = -x$ for all x values which are less than or equal to 0

(b) Also draw part of the curve $y = x$ for $x \geq 0$ on the same grid.
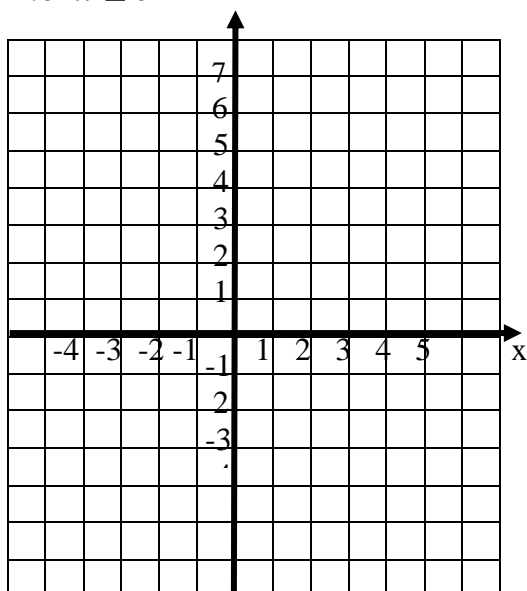
5(a) Draw y = 3 just for x values less than or equal to 0 (ie x ≤ 0)

(b) Draw y = 3 − x just for x values 0 < x < 3.
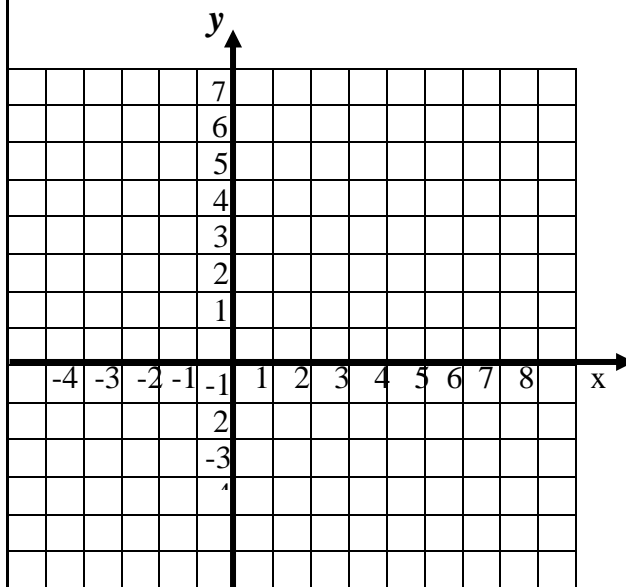
(c) Draw y = x − 3 just for x values x ≥ 3.

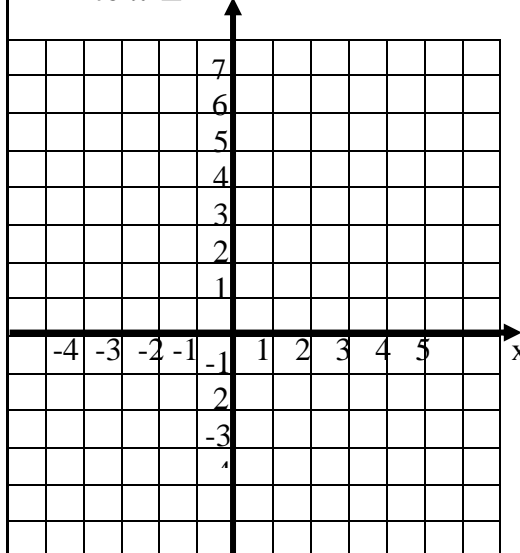**6.(a) On the grid below, draw part of the graph of y = 4 for all x values which are less than or equal to 0 ie x ≤ 0**

(b) Draw part of the graph y = 2 for x values between 0 and 3 ie 0 < x < 3

(c) Draw part of the graph y = 1 for x values over 3 ie x ≥ 3

7. Draw y = 5 for x ≤ − 2 and on the same grid draw y = 3 for -2 < x ≤ 2 and y = 1 for x > 2

8. On the grid below, draw part of the graph of y = x + 5 for all x values which are less than or equal to –2 ie x ≤ –2
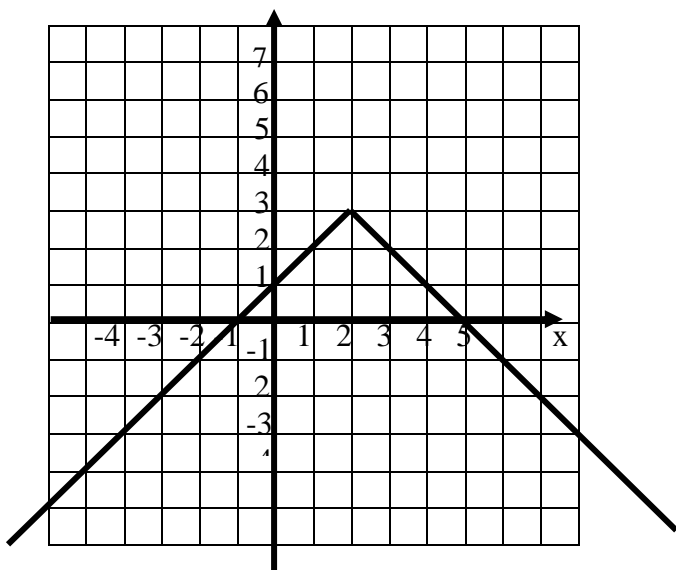
(b) Also draw part of the graph y = 4 for –2 < x < 2

(c) Also draw part of the graph y = 2 − x for x ≥ 2

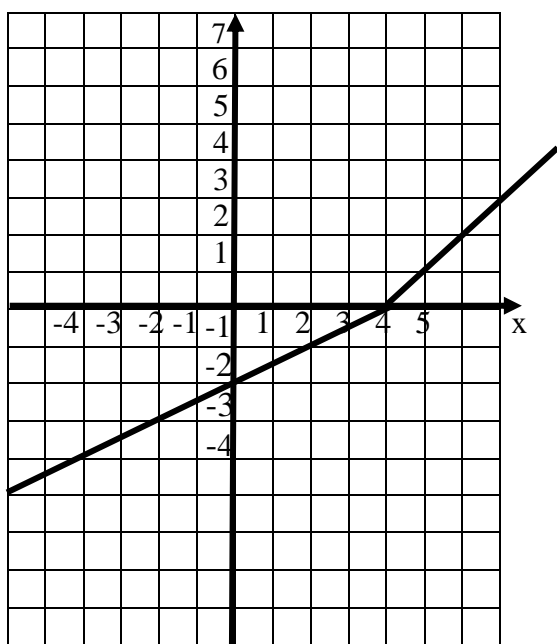*1(a) Draw $y = x + 1$ just for x values less than or equal to 2 (ie $x \leq 2$)*

(b) Draw $y = 5 - x$ just for x values ≥ 2

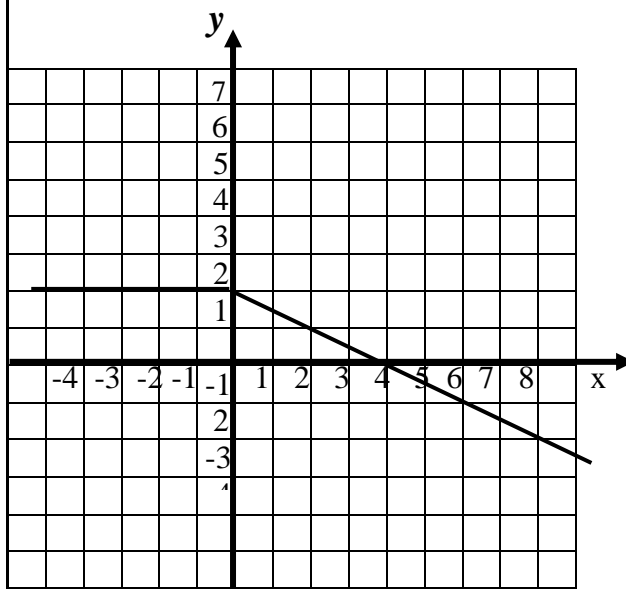*and draw this on the above grid.*

2.(a) On the grid below, draw part of the graph of $y = \frac{1}{2}x - 2$ for all x values which are less than or equal to 4
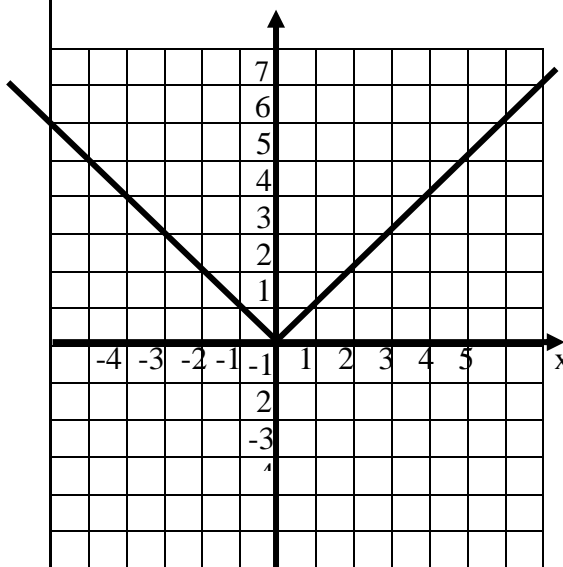
$$ie \quad x \leq 4$$

(b) Draw part of the graph $y = x - 4$ just for $x \geq 4$ and draw this on the above grid.

3. Draw $y = 2$ for $x \leq 0$ and on the same grid draw $y = -\frac{1}{2}x + 2$ for $x \geq 0$
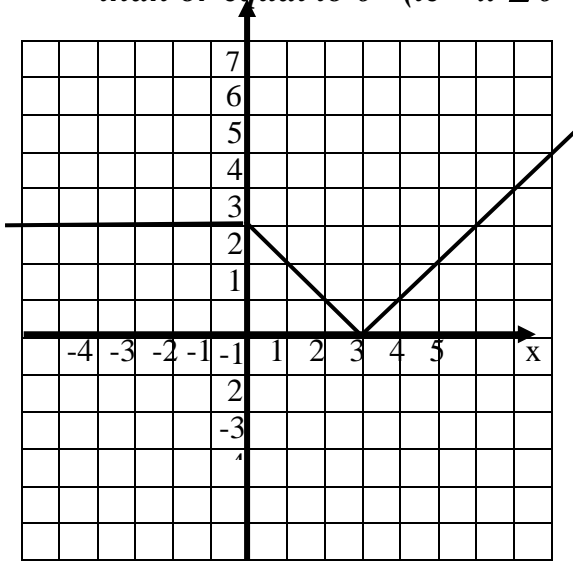

4. On the grid below, draw part of the graph of $y = -x$ for all x values which are less than or equal to 0

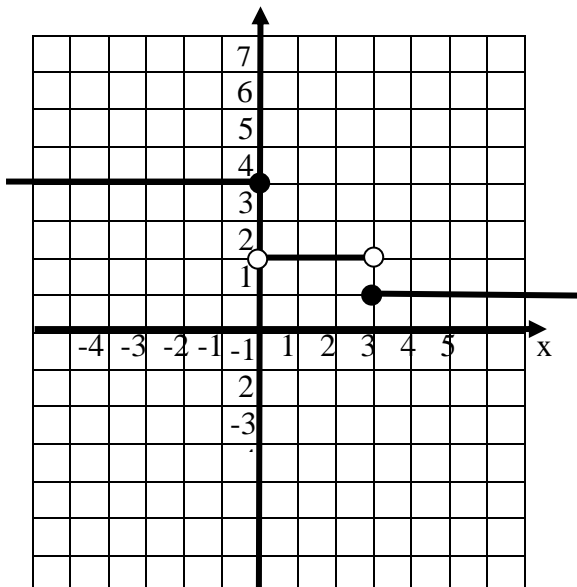*(b) Also draw part of the curve $y = x$ for $x \geq 0$ on the same grid.*

5(a) Draw y = 3 just for x values less than or equal to 0 (ie x ≤ 0)

(b) Draw y = 3 – x just for x values 0 < x < 3.
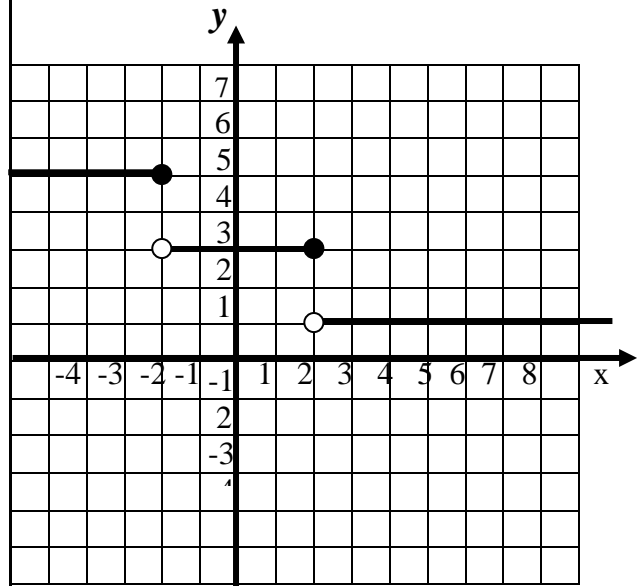
(c) Draw y = x – 3 just for x values x ≥ 3.

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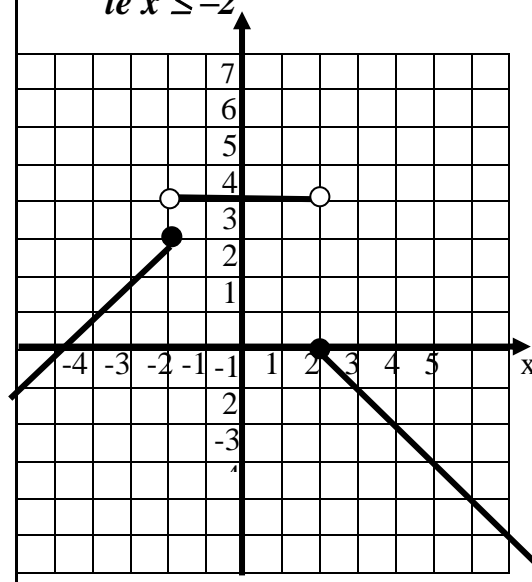**6.(a) On the grid below, draw part of the graph of y = 4 for all x values which are less than or equal to 0 ie x ≤ 0**

(b) Draw part of the graph y = 2 for x Values between 0 and 3 ie 0 < x < 3

(c) Draw part of the graph y = 1 for x Values over 3 ie x ≥ 3

7. Draw y = 5 for x ≤ – 2 and on the same grid draw y = 3 for -2 < x ≤ 2 and y = 1 for x > 2

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8. On the grid below, draw part of the graph of y = x + 5 for all x values which are less than or equal to –2 ie x ≤ –2

(b) Also draw part of the graph y = 4 for –2 < x < 2

(c) Also draw part of the graph y = 2 – x for x ≥ 2