

## Question No 2

1

$$|y| = 3$$

Solution:

$$y = 3$$

$$y = -3$$

$$y = 3 \text{ or } y = -3$$

2

$$|y - 3| = 7$$

Solution:

$$y - 3 = 7$$

$$y = 7 + 3 = 10$$

$$y = 10$$

$$y - 3 = -7$$

$$y = -7 + 3$$

$$y = -4$$

so

$$y = 10 \text{ or } y = -4$$

3

$$|2t + 5| = 4$$

Solution:

$$2t + 5 = 4$$

$$2t = 4 - 5$$

$$2t = -1$$

$$t = \frac{-1}{2}$$

$$2t + 5 = -4$$

$$2t = -4 - 5$$

$$2t = -9$$

$$t = \frac{-9}{2}$$

$$t = \frac{-1}{2} \text{ or } t = \frac{-9}{2}$$



$$4 \quad |1-t| = 1$$

Solution:

$$1-t = 1$$

$$t = 0$$

$$1-t = -1$$

$$t = 2$$

$$t = 0 \text{ or } t = 2$$

$$5 \quad |8-3s| = \frac{9}{2}$$

Solution:

$$8-3s = \frac{9}{2}$$

$$s = \frac{25}{6}$$

$$-3s = \frac{9}{2} - 8$$

$$s = \frac{1}{6} \text{ or } s = \frac{25}{6}$$

$$-3s = \frac{9}{2} - \frac{16}{2}$$

$$-3s = -\frac{7}{2}$$

$$s = \frac{7}{6}$$

$$8-3s = -\frac{9}{2}$$

$$-3s = -\frac{9}{2}$$

$$6 \quad \left| \frac{\theta}{2} - 1 \right| = 1$$

Solution:

$$\frac{\theta}{2} - 1 = 1$$

$$\frac{\theta}{2} = 2 + 1$$

$$\theta = 4$$

$$\frac{\theta}{2} - 1 = -1$$

$$\frac{\theta}{2} = 0$$

$$\theta = 0$$

$$\theta = 4 \text{ or } \theta = 0$$