## Exercise 40

Inequalities Write each statement in terms of inequalities.
(a) $y$ is negative.
(b) $z$ is greater than 1 .
(c) $b$ is at most 8 .
(d) $w$ is positive and is less than or equal to 17 .
(e) $y$ is at least 2 units from $\pi$.

## Solution

$y$ is negative: $y<0$.
$z$ is greater than 1: $z>1$.
$b$ is at most $8: b \leq 8$.
$w$ is positive and is less than or equal to 17 : $0<w \leq 17$.
$y$ is at least 2 units from $\pi: d(\pi, y) \geq 2$ or $|y-\pi| \geq 2$.

