## 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

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y is negative: y < 0.

z is greater than 1: z > 1.

b is at most 8: b \le 8.

w is positive and is less than or equal to 17: 0 < w \le 17.

y is at least 2 units from \pi: d(\pi,y) \ge 2 or |y-\pi| \ge 2.
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