

Solutions to Quiz 1, Unit 1.5



The questions below refer to the phase line for a function shown above.

1. The point -2 is:

- A. a stable fixed point
- B. an unstable fix point
- C. not a fixed point

Solution: The answer is **A**. -2 is stable. Points near -2 , when iterated, get closer to -2 .

2. The point 0 is:

- A. a stable fixed point
- B. an unstable fix point
- C. not a fixed point

Solution: The answer is **C**. 0 is not a fixed point. Fixed points are indicated with dots on a phase line. In this case, 0 will move toward the stable fixed point at -2 . But the point 0 is not fixed; it moves toward -2 when iterated with the function.

3. The point 3 is:

- A. a stable fixed point
- B. an unstable fix point
- C. not a fixed point

Solution: The answer is **B**. 3 is unstable. Points near 3 , when iterated, get farther away from 3 .