Sequences Practice Problems
Answers

For each of the following problems, determine whether the sequence $\{a_n\}$ converges or diverges. If the sequence converges, find its limit.

1. converges to 5

2. converges to $1/3$

3. converges to 0

4. converges to 1

5. diverges

6. diverges

7. converges to 0

8. diverges

9. converges to 0

10. converges to 1

11. converges to 0

12. converges to 0

13. diverges

14. converges to 0

15. converges to 0

16. converges to $\ln 2$

17. diverges

18. converges to 2

19. (a) diverges, (b) converges to 2

20. The sequence is monotone decreasing and bounded below by 0. Thus, the sequence converges.