172 Quiz 11   Name: _____
Fill in the definitions (look them up if needed)

1. A sequence a_n has a limit L if

2. A sequence is **increasing** if

3. A sequence is **decreasing** if

4. A sequence is **monotonic** if

5. A sequence is **bounded above** if

6. A sequence is **bounded below** if

7. A sequence is **bounded** if

8. Write the first 4 terms of the sequence
$$a_n = \frac{n-1}{n+1}$$

9. Write the first 4 terms of the sequence given by the recursion
$$a_1 = 3, a_n = \frac{1}{4 - a_{n-1}}$$

10. Write the first 4 terms of the sequence given by the recursion
$$a_1 = 2, a_n = \frac{1}{2}\left(a_{n-1} + \frac{5}{a_{n-1}}\right)$$