Notebook

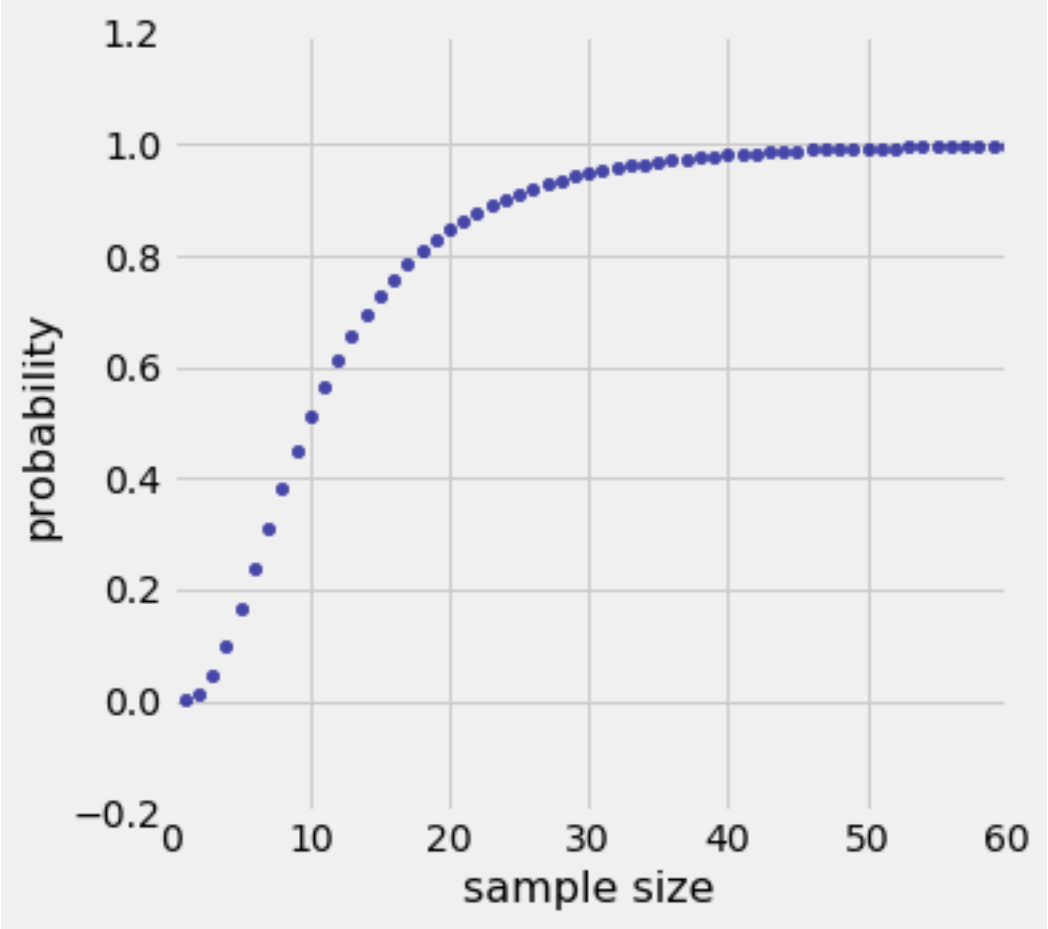
February 12, 2019

Local date & time is : 02/12/2019 10:31:37 PST

In [10]:
```
#Answer to 4b

        def p_at_least_one(n):
            prob = np.arange(1, 5) / 10
            return np.prod(1 - stats.poisson.pmf(0, prob * n))
        k = np.arange(1, 61)
        results = Table().with_column('sample size', k)
        probs = results.apply(p_at_least_one, 0)
        results = results.with_column('probability', probs)

        results.scatter('sample size', 'probability')
        plt.xlim(0, 60)
        plt.ylim(-0.2, 1.2);
```



In [11]:
```
#Answer for 4c
pb = np.arange(1, 5) / 10
np.prod(1 - stats.poisson.cdf(1, pb * 50))
```

Out[11]: 0.9590883725969347