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ANSWERS TO EVEN-NUMBERED EXERCISES

2. What kind of DNS record is likely to be returned when a Web browser tries to resolve the domain part of a URI?

An A (address) record points to a domain.

3. What are MX resource records for?

4. How would you find the IP address of `example.com` from the command line?

```
$ hostname example.com
```

or

```
$ dig example.com
```

6. How would you instruct a DNS server to respond only to queries from the **137.44.*** IP range?

Add the following line to the Options clause in `/etc/bind/named.conf`:

```
allow-query { 137.44.0.0/24 };
```

8. How would you set up a private domain name hierarchy that does not include any of the official InterNIC-assigned domain names?

Set up a DNS cache that defines the zone `.` (period) clause explicitly, rather than relying on the hint file.

10. It is often irritating to have to wait for DNS records to update around the world when you change DNS entries. You could prevent this delay by setting the TTL to a small number. Why is setting the TTL to a small number a bad idea?

Setting the TTL to a small number prevents DNS caches from holding DNS entries for very long. Small TTL values place a large load on the local DNS server because every query about the domain is forwarded to the local server.