

Chapter 1 Solutions

1. B
2. Population: all adults in the US / Sample: the 500 US adults surveyed / Variable: whether they read an e-book
3. (a) continuous (b) discrete (c) continuous (d) continuous (e) discrete (f) continuous
4. (a) discrete
(b) categorical (ordinal)
(c) discrete
(d) continuous
5. B
6. population - all fake tan products; sample - 20 fake tan products selected; variable = amount of dihydroxyacetone
7. (a) Experimental
(b) lifetime of blossom
(c) No. They only used the first 50 roses from the season. This biases the sample towards early-bloom roses. They should select roses throughout the season to get a random sample.
8. (a) observational (b) presence of flaws (c) No - this only examines aircrafts used by American Airlines that are currently in operation. To have a good representative of all Dreamline aircrafts, we would prefer to take a random sample across all existing aircrafts of this type (for multiple airlines in multiple countries produced at different times).