### 12.2 Independent Practice

TEKS 7.12.B, 7.6.F
9. A manager samples the receipts of every fifth person who goes through the line. Out of 50 people, 4 had a mispriced item. If 600 people go to this store each day, how many people would you expect to have a mispriced item?
10. Jerry randomly selects 20 boxes of crayons from the shelf and finds 2 boxes with at least one broken crayon. If the shelf holds 130 boxes, how many would you expect to have at least one broken crayon?
11. A random sample of dogs at different animal shelters in a city shows that 12 of the 60 dogs are puppies. The city's animal shelters collectively house 1,200 dogs each year. About how many dogs in all of the city's animal shelters are puppies?
12. Part of the population of 10,800 hawks at a national park are building a nest. A random sample of 72 hawks shows that 12 of them are building a nest. Estimate the number of hawks building a nest in the population.
13. In a wildlife preserve a random sample of the population of 150 raccoons was caught and weighed. The results, given in pounds, were $17,19,20,21,23,27,28,28,28$ and 32 . Jean made the qualitative statement,"The average weight of the raccoon population is 25 pounds." Is her statement reasonable? Explain.
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14. Greta collects the number of miles run each week from a random sample of female marathon runners. Her data is shown below. She made the qualitative statement, " $25 \%$ of female marathoners run 13 or more miles a week." Is her statement reasonable? Explain. Data: 13, 14, 18, 13, $12,17,15,12,13,19,11,14,14,18,22,12$
15. A random sample of 20 of the 200 students at Garland Elementary is asked how many siblings each has. The data was ordered as shown. Make a dot plot of the data. Then make a qualitative statement about the population. Data: $0,1,1,1,1,1,1,2,2,2,2$, 2, 3, 3, 3, 3, 4, 4, 4, 6
16. Linda collects a random sample of 12 of the 98 Wilderness Club members' ages. She makes an inference that most wilderness club members are between 20 and 40 years old. Describe what a box plot that would confirm Linda's inference should look like.
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