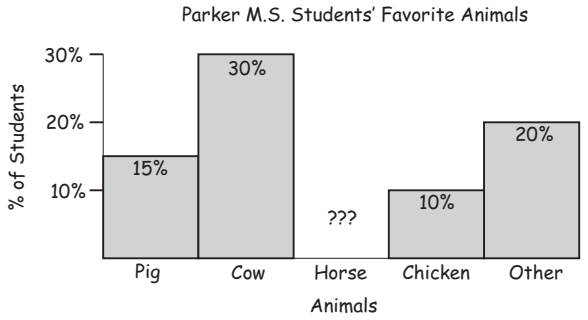
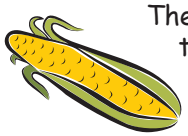
Warm-Up 4

1. _____ % The students at Parker M.S. each submitted one vote for their favorite animal on Old MacDonald's Farm. The exact results are shown in this histogram. What percent of the students voted for the horse?



2. _____ sq ft  The perimeter of a rectangular cornfield is 144 feet. The length of the field is 12 feet more than the width. What is the area, in square feet, of the cornfield?

3. _____ LaShawn's mystery number is a positive integer less than 40, and her mystery number has exactly three distinct prime factors. What is LaShawn's mystery number?

4. _____ baskets Kobe participated in a free-throw shooting tournament. Each contestant was given 20 chances to make baskets from the free-throw line. If Kobe makes a basket, he receives 5 points. If he misses the basket, he loses 3 points. Kobe's final score was 12 points. How many baskets did he make?

5. _____ years The ages of 19 of the 20 members of the Screamville Choir are 18, 22, 23, 24, 24, 25, 25, 25, 26, 26, 26, 27, 27, 27, 28, 32, 33, 33 and 33 years. If the age of the member whose age was left out is equal to the median and the unique mode of the 20 ages, what is the age of the member who was left out?

6. _____ hours 

In an effort to reduce accidents, the highway authority decided to reduce the speed limit on the road from 65 mph to 50 mph. To travel 650 miles, how many more hours will it take a car averaging 50 mph than a car averaging 65 mph?

7. _____ If the value of x in the equation $4x - 5 = 3$ is half the value of x in the equation $kx + 10 = 2$, then what is the value of k?

8. _____ The cost of 3 dings is the same as the cost of 5 bings, and 8 bings cost five times as much as 7 lings. What is the ratio of the cost of a ling to the cost of a ding? Express your answer as a common fraction.

9. _____ A square piece of paper, 12 cm on each side, is folded in half vertically. Both layers are then cut in half parallel to the fold, resulting in three new rectangles: a large one and two identical small ones. What is the ratio of the perimeter of one of the new small rectangles to the perimeter of the new large rectangle? Express your answer as a common fraction.

10. _____ integers N is an integer greater than 5, and when 205 is divided by N, the remainder is 5. For how many distinct positive integers N is this statement true?