$\dfrac{48}{48} = 100$

Name: _Key_   Date: _July 27, 2015_

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Complete the frequency/relative frequency table for the data given.

1) Kevin asked some of his friends how many hours they worked during the previous week at their after–school jobs.

6 6 6 4 6 6 9 7 6 4 7 6

6 7 6 6 7 6 6 7 6 7 7 4

$n = 24$

Hours	Frequency	Relative Frequency	
3-4	3	$3/24 = 1/8 =$	12.5%
5-6	13	$13/24 =$	54%
7-8	7	$7/24 =$	29%
9-10	1	$1/24 =$	4%
	24		

Construct a bar graph as requested.

2) The table lists blood types in a sample of hospital patients. Construct a bar graph for the relative frequency data.

Blood type	Frequency	Relative frequency
O	22	0.44
A	19	0.38
B	6	0.12
AB	3	0.06
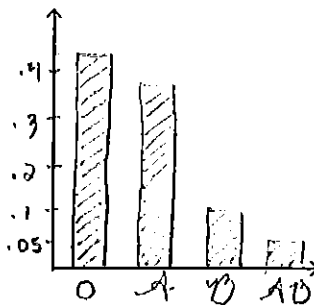
Construct the specified histogram.

3) During the quality control process at a manufacturing plant, 142 finished items are randomly selected and weighed. The results are summarized in the frequency table below. Construct a relative–frequency histogram corresponding to the frequency table.

Weight (g)	Frequency
0.35 – 0.44	`32·
0.45 – 0.54	82
0.55 – 0.64	17
0.65 – 0.74	11
	142

$32/142 = 22.5\%$

$82/142 = 57.7\%$

$17/142 = 12.0\%$

$11/142 = 08.0\%$

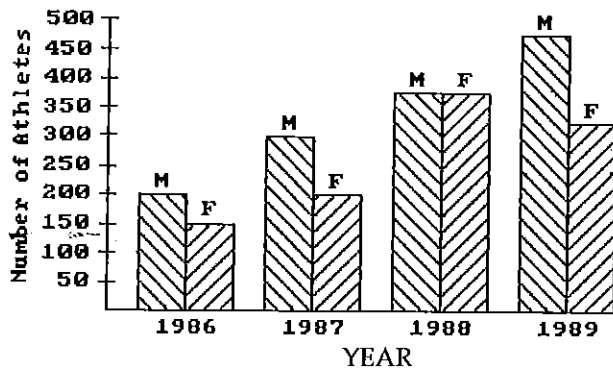.35   .445   .545   .645   .745
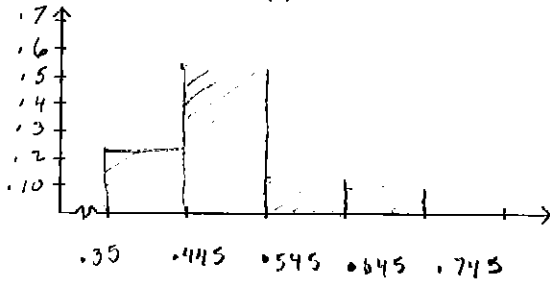
Solve the problem.

4) The ages of people randomly surveyed on a college campus are summarized in the bar graph.
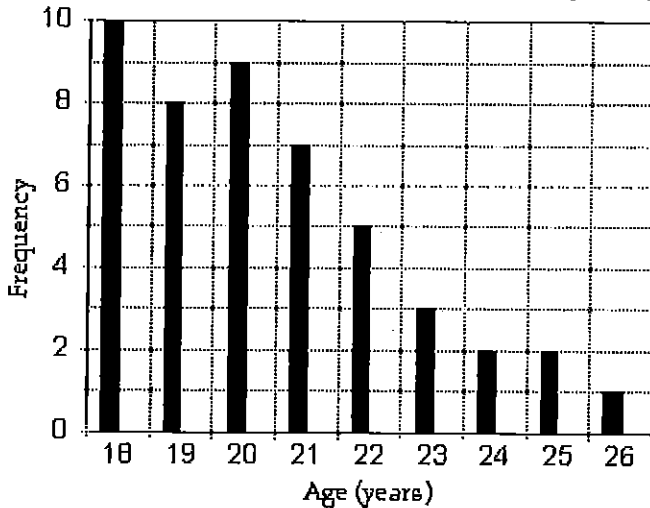
How many people were 19 years old?   8

This double-bar graph shows the number of male (M) and female (F) athletes at a university over a four-year period. Answer the question.

5) Which year had the greatest number of male athletes? 1989

Find the mean, median, and mode for the given distribution.

6) 6, 4, 2, 9, 10, 6, 6, 4, 9, 10, 6, 2, 12, 9, 6, 6, 2, 4, 9, 6 $n = 20$

$$\bar{x} = \frac{\sum x}{n} = \frac{128}{20} = \boxed{6.4}$$

Median: 2, 2, 2, 4, 4, 4, 6, 6, 6, 6, 6, 6, 6, 9, 9, 9, 9, 10, 10, 12

$12/2 = \boxed{6}$

Mode: $\boxed{6}$

Solve the problem. Round to the nearest hundredth, if necessary.

7) The following data gives the number of applicants that applied for a job at a given company each month of 2014: 64, 68, 95, 76, 78, 82, 87, 88, 91, 95, 72, 64. What is the mode of the data?
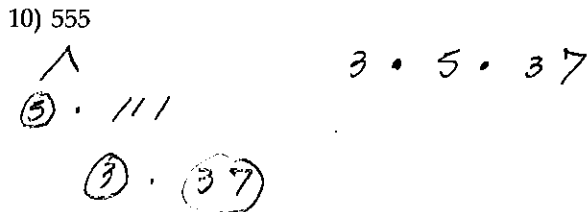
64 and 95

8) Of the three Measures of Central Tendency, which one is most effective by outliers?

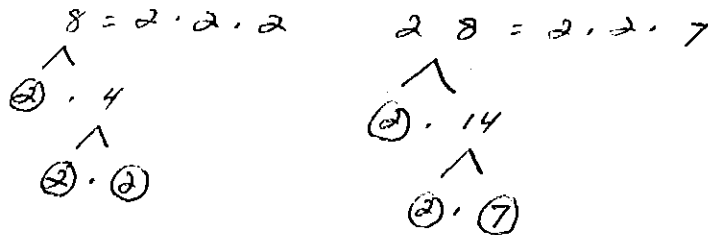the Mean

Identify the number as either prime or composite.

9) 36

$$\wedge$$
$$②\cdot18$$
$$\wedge$$
$$②\cdot9$$
$$\wedge$$
$$③\cdot③$$

Composite
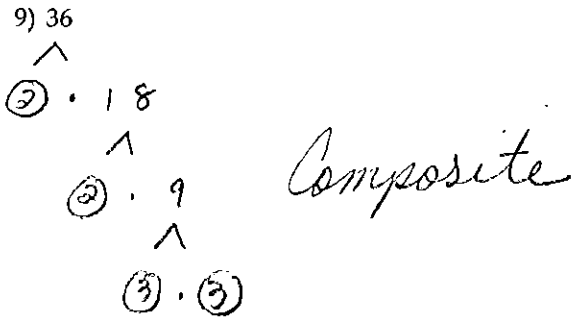
Give the prime factorization of the number. Use exponents when possible.

10) 555

$$\wedge$$
$$⑤\cdot111$$
$$\wedge$$
$$③\cdot③⑦$$

$$3\cdot5\cdot37$$

Find the LCM for the pair of natural numbers.

11) 8, 28

$$8=2\cdot2\cdot2 \qquad 28=2\cdot2\cdot7$$

$$\wedge$$
$$②\cdot4$$
$$\wedge$$
$$②\cdot②$$

$$\wedge$$
$$②\cdot14$$
$$\wedge$$
$$②\cdot⑦$$

$$LCM(8,28)=2^3\cdot7=8\cdot7=\boxed{56}$$

Find n(A) for the set.

12) A = {∅, 0}

$$n(A)=2$$