

Section 6: Probability, Statistics, Data Analysis

Words to Know: Sample, Data Set, Mean, Median, Mode,
Range, Independent Events, Conditional Events,
Permutation

Mean, Median, Mode, and Range (A)

Calculate the mean, median, mode, and range of each set of numbers.

1) {18, 18, 63, 63, 84}

2) {19, 21, 29, 32, 89}

3) {41, 41, 41, 44, 90}

4) {25, 37, 39, 85, 85}

5) {12, 36, 64, 65, 82}

6) {30, 57, 59, 76, 91}

7) {27, 27, 49, 77, 84}

8) {25, 46, 62, 76, 97}

9) {22, 35, 58, 63, 75}

10) {45, 45, 47, 88, 89}

11) {58, 84, 90, 90, 97}

12) {25, 36, 36, 40, 68}

13) {18, 18, 33, 34, 54}

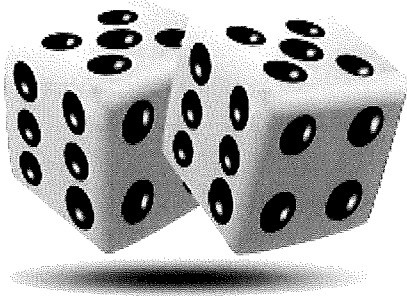
14) {19, 19, 27, 36, 64}

15) {34, 52, 75, 85, 90}

16) {55, 57, 68, 82, 99}

Sum of Two Dice Probabilities (A)

Find the probability of each sum when two dice are rolled.



+	1	2	3	4	5	6
1	2	3	4	5	6	7
2	3	4	5	6	7	8
3	4	5	6	7	8	9
4	5	6	7	8	9	10
5	6	7	8	9	10	11
6	7	8	9	10	11	12

$P(>2) =$

$P(<11) =$

$P(\geq 2) =$

$P(\geq 12) =$

$P(\leq 7) =$

$P(<5) =$

$P(\leq 5) =$

$P(10) =$

$P(\geq 8) =$

$P(<6) =$

$P(\geq 12) =$

$P(\leq 10) =$

$P(\geq 6) =$

$P(\leq 12) =$

$P(\geq 11) =$

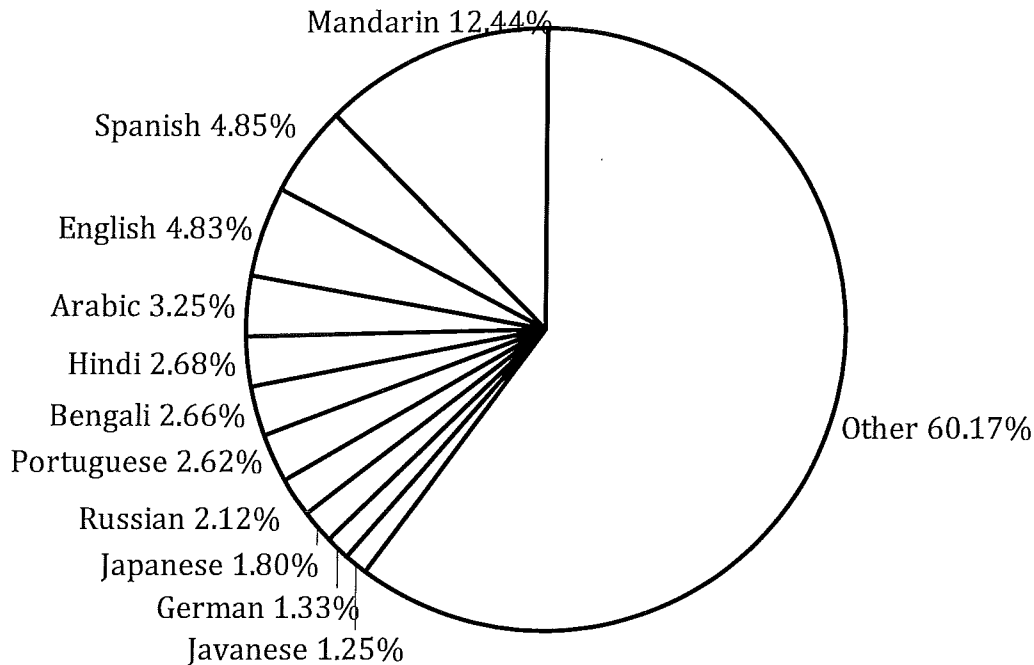
$P(>5) =$

Interpreting Circle Graphs (A)

Answer the questions about the circle graph.

Languages of the World (2009 Estimate)

Percentage of people who speak each language as their first language.



Source of data: <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>

Which language is spoken by the most people?

What percentage of people speak one of the top 10 languages?

What percentage of people speak one of the top 5 languages?

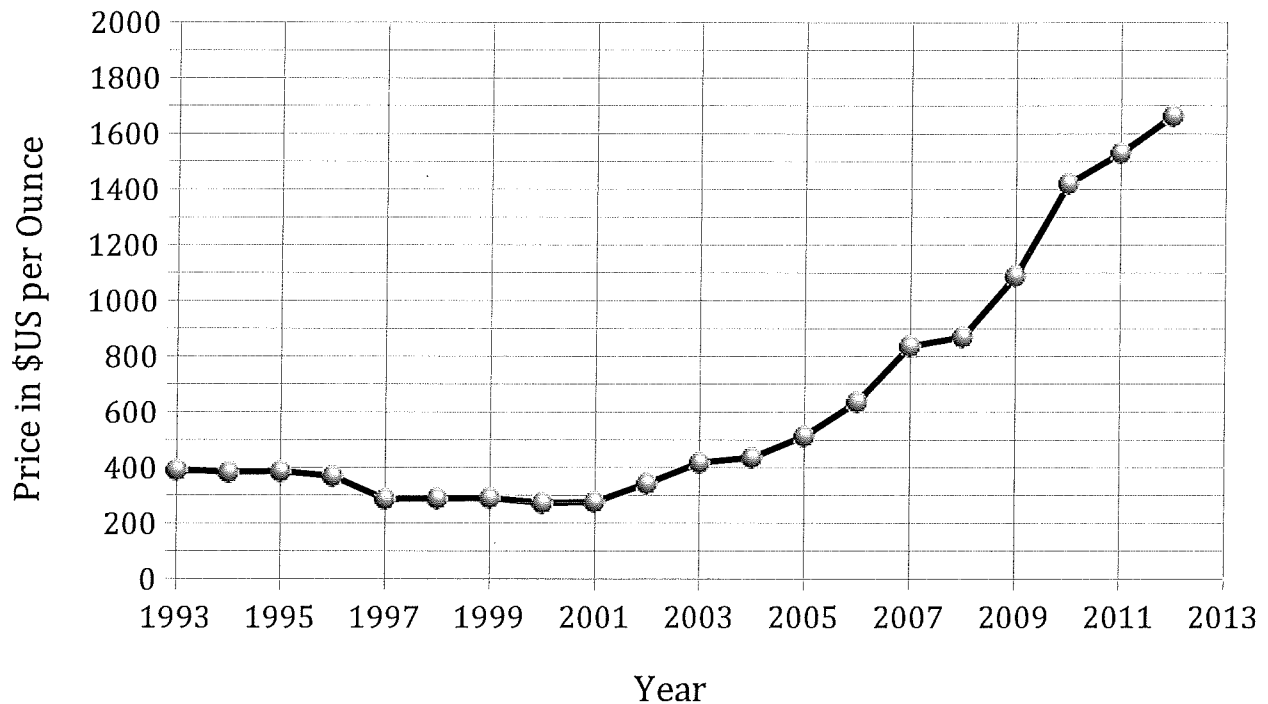
If the world population was 6.8 billion in 2009, how many of those people spoke Portuguese?

There are an estimated 7,100 languages spoken in the world. Do you think this number will increase or decrease? Explain your answer.

Interpreting Broken-Line Graphs (A)

Answer the questions about the broken-line graph.

Historical Gold Prices 1993 to 2012



Source of data: <http://onlygold.com/tutorialpages/prices200yrsfs.htm>

In what years did gold decrease in value?

In what year do you think the price of gold will reach \$2000 per ounce?

In what 3 years did gold increase the most?

What was the approximate price of gold from 1997 to 1999?

If someone bought \$20,000 worth of gold in 1993, how much would that gold be worth in 2011?