Average	$\dfrac{A+B+C+\cdots}{\#\ of\ items}$
Participation Rate	$\dfrac{\#\ who\ are\ participating}{\#\ who\ are\ eligible\ to\ participate}$
Participation Ratio	$Participants : Eligibles$
% to Decimal	divide by 100 $7.5\% = 0.075$
Decimal to %	multiply by 100 $0.7 = 70\%$
Percentage	$\dfrac{part}{whole} \quad or \quad \dfrac{is}{of} = \dfrac{\%}{100}$
Percent Change	$\dfrac{new-original}{original} \times 100\%$

Example Question Set A.

Nielsen TV Ratings

TOP 10 LIST FOR	Cable Network TV - United States			Week of Aug. 21, 2017
RANK	**PROGRAM**	**NETWORK**	**RATING**	**VIEWERS (000)**
1	GAME OF THRONES	HBO PRIME	6.4	12,072
2	BREAK	HBO PRIME	3.6	6,690
3	PRES ADDRESS-AFGHANISTAN	FOX NEWS CHANNEL	3.3	5,117
4	HANNITY	FOX NEWS CHANNEL	2.9	4,582
5	PRES ADDRESS/ANALYSIS	FOX NEWS CHANNEL	2.8	4,443
6	NFL PRE-SEASON FOOTBALL L (GIANTS/BROWNS)	ESPN	2.3	3,577
6	SPECIAL RPT W/BRET BAIER	FOX NEWS CHANNEL	2.3	3,548
8	PRES ADDRESS CVG	FOX NEWS CHANNEL	2.3	3,468
9	WWE ENTERTAINMENT (WWE RAW)	USA NETWORK	2.1	3,588
10	RACHEL MADDOW SHOW	MSNBC	2.1	3,129

Source: Nielsen. Total Day Cable Programs. Viewing estimates on this page include Live viewing and DVR playback on the Same Day, defined as 3am-3am. Ratings are the percentage of TV homes in the U.S. tuned into television.

1) For the week of August 14th, Game of Thrones had 10.24 million viewers. What is the percentage increase in viewers for the week of August 21st?

2) What is the ratio of people who watched Game of Thrones to people who watched the Giants/Browns pre-season game?

3) There were 15,000 people in the arena for the WWE RAW live show. Assuming no one present at the live show also watched the show on television, what percentage of people who saw the show saw it in person?

Example Question Set B.
Sourced from https://www.cs.ny.gov/pio/publications/howtotakeawrittentest.pdf

Base your answers to the next three sample questions on the table, "Summary Report of Business Expenses for 2009." Complete as much of the report as you need to answer the sample questions. Use the information given in the summary report itself and in the table, "Report of Business Expenses, 3rd and 4th Quarters."

REPORT OF BUSINESS EXPENSES 3rd AND 4th QUARTERS (26 weeks)

	3rd Quarter		4th Quarter	
	2009	2008	2009	2008
Payroll Expenses	$55,900	$47,800	$72,700	$65,100
Rental Expenses	22,500	18,900	22,500	18,900
Equipment Expenses				
New Equipment	705	375	5,575	675
Maintenance/Repair	2,860	3,000	3,140	3,400
Utility Expenses				
Electricity	4,850	4,630	4,590	4,450
Heat	130	270	440	410
Employee Benefit Expenses	18,450	15,850	24,100	21,550
Employee contributions*	*2,500	*2,200	*3,350	*3,040
Total Net Business Expenses*		$88,625		$111,445
*NOTE: Employee Contributions are subtracted from business expenses to obtain Total Net Business Expenses				

SUMMARY REPORT OF BUSINESS EXPENSES FOR 2009

	1st Quarter	2nd Quarter	1st Half	3rd Quarter	4th Quarter	2nd Half	Total for Year
Payroll Expenses	$81,800	$69,300	$151,100			R	
Rental Expenses	22,500	22,500	45,000				
Equipment Expenses	5,235	3,545	8,780				S
Utility Expenses	6,675	5,125	11,800				
Employee Benefit Expenses	26,900	22,900	49,800				
Employee contributions*	*3,750	*3,200	*6,950				
Total Net Business Expenses* for 2009	139,360	120,170	259,530				
Total Net Business Expenses* for 2008			$231,780			$200,070	
% Change **			V				
*NOTE: Employee Contributions are subtracted from business expenses to obtain Total Net Business Expenses							
**NOTE: % Change is the % of increase in Total Net Business Expenses from 2008 to 2009.							

4) What is the value of **R**?
      a. $112,900
      b. $128,600
      c. $137,800
      d. none of the above

5) What is the value of **S**?
      a. $ 8,780
      b. $15,060
      c. $16,230
      d. none of the above

6) Which one of the following is closest to the value of **V**?
      a. 10%
      b. 11%
      c. 12%
      d. 28%

Example Question Set C.
Sourced from
https://www.cs.ny.gov/testing/test_guides/Account_Clerical_HigherLevel_TestGuide.pdf

Base your answers to the following three questions on the information in the table below.

Population of a City by Age and Gender (In Thousands)

Age	Female	Male	Total
Under 25	70	72	142
25-34	?	27	?
35-44	?	28	53
45-54	27	28	55
55-64	30	?	57
65 and over	85	75	160
Total	261	257	518

Note: Spaces with question marks can be filled in using information given in the table and in the questions.

7) How many people in the city were between 25 and 34 years old?
   a. 51
   b. 27,000
   c. 51,000
   d. cannot be determined from the information provided

8) Most nearly what percent of the total population of the city was female aged 35 to 54?
   a. 5%
   b. 10%
   c. 14%
   d. 20%

9) If 40% of the total male population of the city earns wages, and 30% of the total female population of the city earns wages, which one of the following statements comparing the number of males earning wages to the number of females earning wages is true?
   a. There are 24,500 more males than females earning wages.
   b. There are 27,300 more males than females earning wages.
   c. There are 51,800 more males than females earning wages.
   d. There are 27,300 fewer males than females earning wages.