

## Prerequisite Skills

### Percents

- Convert each percent to a decimal.
  - 11%
  - 3.9%
  - 0.15%
  - 12.05%
  - 0.4%
  - $\frac{1}{2}\%$
  - $2\frac{1}{4}\%$
  - $-1\frac{1}{8}\%$
- Estimate each value.
  - $1900 \times 1.05\%$
  - 0.8% of 2600
  - 2.4% of 8280
  - $6720 \times 0.03\%$
- Evaluate. Express each answer as a decimal, rounded to four decimal places.
  - $\frac{5.5\%}{4}$
  - $\frac{7.5\%}{12}$
  - $\frac{9.75\%}{8}$
  - $\frac{5.75\%}{26}$
  - $\frac{12.5\%}{52}$
  - $\frac{10\%}{365}$

### Time

- Convert each time to the unit specified.
  - 1 year to weeks
  - 3 months to weeks
  - 26 weeks to years
  - 3 years to months
  - 18 months to years
  - 146 days to years
- Find the number of intervals in each time period.
  - monthly intervals in 2 years
  - weekly intervals in 1.5 years
  - quarterly intervals in 3 years
  - annual intervals in 5 years
  - semi-annual intervals in 6 years
  - semi-annual intervals in 30 months

### Evaluate Powers

- Evaluate each power. Round to four decimal places where necessary.
  - $5^4$
  - $4^{-2}$
  - $1.08^3$
  - $0.7^{-3}$
  - $\left(1 + \frac{0.05}{12}\right)^{18}$
  - $(1 + 0.045)^{-6}$
- Without calculating, list the following powers in order from least to greatest.  
 $1.13^2$ ,  $1.005^{-1}$ ,  $1.08^2$ ,  $1.2^{-2}$ ,  $1.08^{-2}$

### Exponential Functions

- Determine whether each table of values represents an exponential function. Justify your answer using finite differences, a graph, or common ratios.

a)

$x$	$y$
0	0.08
1	0.32
2	0.64
3	0.96
4	1.28

b)

$x$	$y$
-2	3
-1	6
0	12
1	24
2	48

- Complete the table of values. Then, sketch a graph for the function.

$x$	$y = (1.2)^x$
0	
1	
2	
3	
4	
5	
6	
7	