

VOLUME AND SURFACE AREA OF A CUBE

s = side

V = volume
 $V = s^3$

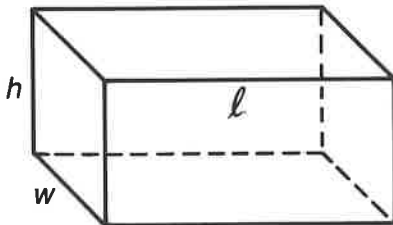
S = surface area
 $S = 6s^2$

Find the volumes and surface areas for the cubes given in the tables below.

	s	V	S
1.	3	27	54
3.	5		
5.	15		

	s	V	S
2.	7		
4.	9		
6.	11		

VOLUME AND SURFACE AREA OF A RECTANGULAR PRISM



l = length
 w = width
 h = height

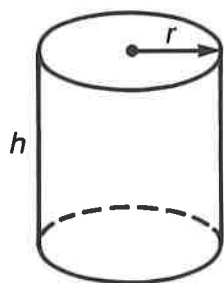
V = volume
 $V = l \cdot w \cdot h$

S = surface area
 $S = 2(lw + hw + lh)$

Find the volumes and surface areas for the rectangular prisms given in the tables below.

	l	w	h	V	S
7.	2	3	5		
9.	7	2	11		
11.	11	6	13		

	l	w	h	V	S
8.	4	10	9		
10.	8	5	13		
12.	21	6	22		



VOLUME AND SURFACE AREA OF A CYLINDER

r = radius
 h = height

V = volume
 $V = \pi r^2 h$

S = surface area
 $S = 2\pi rh$

Find the volumes and surface areas for the cylinders given in the tables below. Use $\frac{22}{7}$ for π .

	r	h	V	S
13.	21	5		
15.	11	21		
17.	12	28		

	r	h	V	S
14.	9	14		
16.	8	35		
18.	4	42		

LINEAR EQUATION PROBLEMS

Complete the tables below using the formula $y = mx + b$.

	m	x	b	y
1.	10	3	17	47
3.	0.9	15	5.6	
5.	$\frac{3}{4}$	24	32	

	m	x	b	y
2.	12	7	19	
4.	0.11	8	0.24	
6.	$\frac{2}{3}$	18	29	

INVESTMENT PROBLEMS (SIMPLE INTEREST)

 p = principal (in dollars) r = rate (expressed as a percent; change to decimal for doing arithmetic) t = time (expressed in years) i = simple interest (expressed in dollars)formula: $i = prt$

Complete the tables below. Express the answers in dollars.

	p	r	t	i
7.	\$560	14%	7y	
9.	\$398	18%	4y	
11.	\$876	13%	12y	

	p	r	t	i
8.	\$340	12%	9y	
10.	\$762	15%	5y	
12.	\$549	17%	14y	

MOTION PROBLEMS

 r = rate (expressed in distance per time unit) t = time (expressed in minutes, hours, etc.) d = distance (expressed in miles, kilometers, feet, etc.)formulas: $d = rt$ $t = \frac{d}{r}$ $r = \frac{d}{t}$

Complete the following table. Write units with all answers.

	r	t	d
13.	35 mi/h	11 h	
15.		3 h	1128 mi
17.	93 km/h		1209 km

	r	t	d
14.	76 mi/h	15 h	
16.		7 h	5124 mi
18.	110 km/h		1870 km