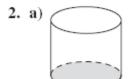
MathLinks 8 Practice and Homework Book Chapter 7 Answers

7 Get Ready

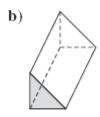
- The right prisms are a) and c) and the right cylinder is f). These figures have faces that meet the base at 90°.
- 2. Answers will vary.
 - a) between 175 and 200
 - b) between 720 and 800
 - c) between 140 and 210
- 3. a) 416 cm² b) 123.8 m² c) 226.5 cm²
- **4.** a) $4 \times 4 \times 4 = 64$ b) $3 \times 3 \times 3 \times 3 \times 3 = 243$
- 5. No, 3 to the power of 4 is $3 \times 3 \times 3 \times 3$, which is 81, and 4 to the power of 3 is $4 \times 4 \times 4$, which is 64.

7.1 Understanding Volume

- a) cylinder/prism, prism/cylinder, ba height
 - b) does not









- 3. a) 756 cm³ b) 162 cm³
- 4. a) 400 cm³ b) 339 cm³ c) 960 cm³
- 5. 105 cm³
- 6. a) Both have a volume of 200 cm3.
 - b) Both have a volume of 10.5 m³.

- 7. a) 7 cm b) 6.5 m
- 8. 24.3 m³
- The chocolate bar on the left has less chocolate.

7.2 Volume of a Prism

- 1. b
- 2. c
- 3. a
- 4. a) 540 cm³ b) 119 m³ c) 2560 cm³
- 5. a) 91.1 cm³ b) 343 cm³
- 6. a) 162 cm³ b) 63.8 m³ c) 120 m³
- 7. a) 384 cm³ b) 672 m³ c) 39 cm³
- The taller container on the left contains more juice.
- 9. 7.2 m^3

7.3 Volume of a Cylinder

- circle
- 2. area, circle
- 3. volume, cylinder, area
- **4.** a) 2119.5 cm³ b) 2034.72 cm³ c) 0.15 m³
- 5. a) 1538.6 cm³ b) 14.47 m³
- a) 1695.6 cm³
 b) 3229.49 cm³
 - c) 113.04 m³ d) 5000.45 cm³
- 7. a) 471 cm³ b) 8 cm
- 8. 0.064 m³

7.4 Solving Problems Involving Prisms and Cylinders

- 1. a) prisms, cylinders b) formula c) diagram
- 2. calculations
- 3. a) Diagrams will vary. b) 22
- **4.** a) 788.53 cm³ b) 938.47 cm³
- 5. Cheyenne

6. a) Answers will vary. Example: I will fit five bead containers across the bottom row, then I will put four bead containers upside down on top of these five containers. I will build three other rows like this, making four rows of nin boxes each.

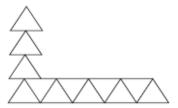
Height of triangle = 3 cm

Base of triangle = 4 cm

4 rows high = 12 cm

9 containers in a row

5 triangles across bottom = 20 cm



b) 36 c) 108

7 Link It Together

- a) Answers will vary depending on the beads selected.
 - b) Favourites = 1.51 cm³, Characteristics = 3.94 cm³, Hobbies = 0.97 cm³, Goals = 0.94 cm³
 - c) Answers will vary depending on design.

7 Vocabulary Link

- 1. d) orientation
- f) right prism
- 3. a) area
- 4. g) volume
- 5. c) height
- 6. e) right cylinder
- 7. b) base of a prism

L					0													_	
H	K	Н	J	Х	(R)	М	0	Ε	Z	0	Р	J	Н	Υ	Υ	T	D	Ε	Α
В	K	J	R	Α	ш	Q	Н	-	ത	K	- 1	K	T	Α	G	N	U	В	Α
N	М	F	V	Н	G	В	U	Z	R	N	U	Т	N	F	K	W	U	1	F
N	C	Н	L	B	H	0	Q	Н	H	Ε	J	٧	Z	Х	L	0	S	Х	Н
D	В	Z	1	Α	T	Ε	М	S	E	٧	D	V	G	٧	K	Α	T	N	L
1	D	Q	Т	S	P	R	T	0	N	G	В	G	J	L	F	G	U	Υ	N
х	Т	Х	Н	E	(R	Т	G	Н	Т	С	Υ	L	Т	N	D	Е	R)	C	Р
В	М	Α	Ε	0	Т	D	F	F	Α	W	P	В	F	F	Α	J	P	Ε	R
G	Т	Х	Α	F	S	C	Α	Ε	T	Q	Р	M	S	G	Ε	N	٧	Α	Α
U	Α	В	U	Α	(M)	Υ	Α	L	$ \mathbf{u} $	D	L	E	K	J	S	Н	N	R	J
Υ	J	М	Т	P	v	S	Т	C	0	٧	V	ш	J	Υ	R	0	S	В	Z
Z	Z	Z	В	R	Υ	Α	N	D	(N)	1	L	G	Н	Τ	W	K	R	Υ	R
C	J	Ε	Α	ш	Z	В	L	М	F	В	M	H	Q	٧	R	D	C	Z	Ε
Q	P	G	C	S	Ε	C	Т	R	М	Р	0	lτJ	R	٧	D	T	N	L	G
W	Α	W	М	M	Х	L	W	D	Z	W	ΙL	Ŭ	K	1	(A	R	Е	A)	G
Х	J	V	Z	K	Q	Q	J	D	D	W	U	w	В	Τ	Y	J	0	M	Z
E	Q	U	N	Α	Х	A	Х	М	Υ	Q	M	J	K	1	V	В	R	Z	F
0	D	Р	Р	K	G	٧	1	٧	U	0	E	T	Н	В	J	Ε	F	Z	R