

3 Develop the Concept

Problem Solving

Exercise	Content
13	Equivalent Decimals
14	Identifying Solid Figures
15	Adding Fractions ($6\frac{1}{2} + 5\frac{1}{2}$)
16	Use Logical Reasoning Identifying Solid Figures
17	Multiplication (29×6)
18	Properties of Solid Figures
19	Addition ($19 + 12 + 8.25$)
20	Identifying Solid Figures
21	Identifying Solid Figures
22	Equations with Variables ($75 + 39 = t$)
23	Use Logical Reasoning

Students use underlying processes and mathematical tools for Exercises 13–23. Remind students to check for reasonableness when solving each problem.

Exercise 16


Language of Math: Identify Relationships Remind students that a prism has 2 faces (the bases) that are parallel and congruent. So this prism must have 3 faces that are not bases. For those 3 faces to meet at edges, the bases must be triangles. The prism is a triangular prism.

Exercise 20


Test-Taking Tip: Make Smart Choices Encourage students to eliminate wrong answers. *What are the characteristics of a rectangular prism?* [It has rectangular faces.] *Which item does not have rectangular faces?* [The cylinder of tennis balls]

Problem Solving


- Which of the following decimals is equivalent to 12.45?
 - 12.0045
 - 12.0450
 - 12.4500
 - 124.5000
- Luke's tent weighs $6\frac{1}{2}$ pounds. His fishing tackle weighs $5\frac{1}{2}$ pounds. What is the total weight of both items?
12 pounds
- One week, Mary worked for 29 hours. She earned \$6 per hour. How much did Mary earn for the time she worked?
\$174
- Before Andy went shopping, he added \$5 he had earned to the money that was already in his wallet. He bought a backpack for \$19 and a headset for \$12. After he paid for the items, Andy had \$8.25 left. How much money did Andy have in his wallet before adding the \$5?
\$34.25
- Tori gates are often found in Japan where they originated. What kinds of solids can you find in a Tori gate?
Cylinder, rectangular prism
- Which of the following solids has a curved surface?
 - Pyramid
 - Cube
 - Prism
 - Cone
- Reasoning** A certain kind of prism has 9 edges and 5 faces. What kind of prism is it?
Triangular prism
- Wei made two square pyramids and glued the congruent bases together. How many faces does her figure have?
8 faces
- Which of the following is NOT a rectangular prism?




A



C



B



D
- Algebra** Fillmore Park had 75 spruce trees. Volunteers planted 39 more of these trees. Solve $75 + 39 = t$ to find the total number of spruce trees in the park now.
114 spruce trees
- Reasoning** Another solid figure is the sphere. It has a point that is exactly in the center. What do you know about the distance from any point on the sphere to the center? **All points on the sphere are the same distance from the center.**



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