

Lesson 1 Practice Problems

Problem 1

In a fruit basket there are 9 bananas, 4 apples, and 3 plums.

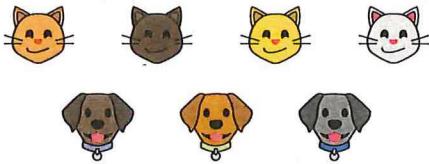
- The ratio of bananas to apples is _____ : _____.
- The ratio of plums to apples is _____ to _____.
- For every _____ apples, there are _____ plums.
- For every 3 bananas there is one _____.

Possible Solutions

- 9, 4
- 3, 4
- 4, 3
- plum

Problem 2

Complete the sentences to describe this picture.



- The ratio of dogs to cats is _____.
- For every _____ dogs, there are _____ cats.

Possible Solutions

- 3 to 4
- 3, 4

Find the volume and surface area of each prism.

- a. Prism A: 3 cm by 3 cm by 3 cm



- b. Prism B: 5 cm by 5 cm by 1 cm



- c. Compare the volumes of the prisms and then their surface areas. Does the prism with the greater volume also have the greater surface area?

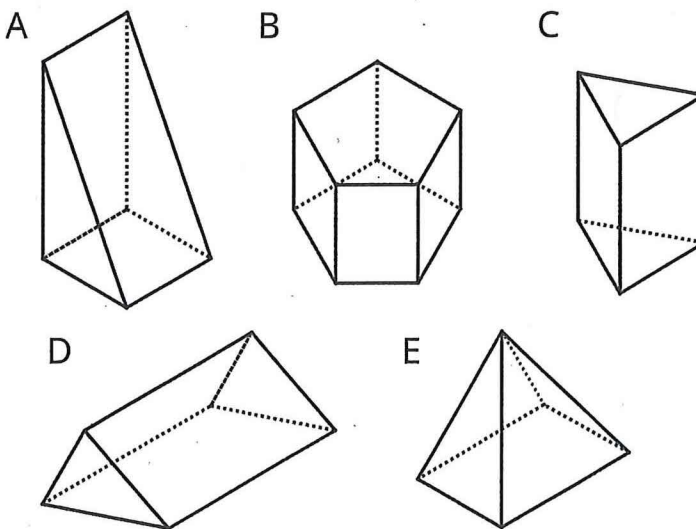
Possible Solutions

- a. Volume: 27 cubic inches, surface area: 54 square inches
- b. Volume: 25 cubic inches, surface area: 70 square inches
- c. Prism A has a greater volume, but Prism B has a greater surface area.

Problem 6

From Grade 6, Unit 1, Lesson 13

Which figure is a triangular prism? Select **all** that apply.



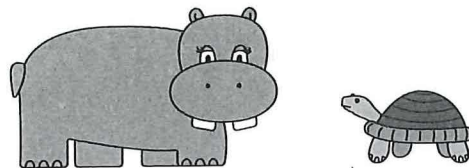
Possible Solutions

A, C, D

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Problem 3

Write two different sentences that use ratios to describe the number of eyes and legs in this picture.



Possible Solutions

Answers vary. Sample responses:

- The ratio of legs to eyes is 8 to 4.
- The ratio of eyes to legs is 4 : 8.
- There are 2 legs for every eye.
- There are 4 legs for every 2 eyes.

Problem 4

From Grade 6, Unit 1, Lesson 17

Choose an appropriate unit of measurement for each quantity.

- | | |
|------------------------|-------------------|
| a. area of a rectangle | • cm |
| b. volume of a prism | • cm ³ |
| c. side of a square | • cm ² |
| d. area of a square | |
| e. volume of a cube | |

Possible Solutions

- cm²
- cm³
- cm
- cm²
- cm³

Problem 5

From Grade 6, Unit 1, Lesson 16



