



NAME \_\_\_\_\_

DATE \_\_\_\_\_

PERIOD \_\_\_\_\_

## Unit 2, Lesson 1

### Practice Problems

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

- a. The ratio of bananas to apples is 9 : 4.
- b. The ratio of plums to apples is 3 to 4.
- c. For every 4 apples, there are 3 plums.
- d. For every 3 bananas there is one plum.

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2. Complete the sentences to describe this picture.

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a. The ratio of dogs to cats is ~~1~~ 3 : 4

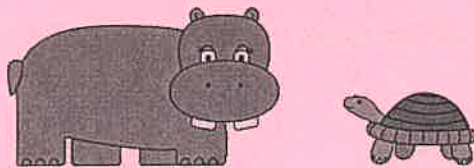
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b. For every 3 dogs, there are 4 cats.

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



E	L
4	8
2	4
1	2

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4. Choose an appropriate unit of measurement for each quantity.

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

- cm C
- $cm^3$  b, e
- $cm^2$  a, d

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5. Find the volume and surface area of each prism.

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

$V = 3 \cdot 3 \cdot 3 = 27 \text{ cm}^3$   
 $SA = 6(3 \cdot 3) = 54 \text{ cm}^2$



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

$V = 5 \cdot 5 \cdot 1 = 25 \text{ cm}^3$   
 $SA = 2(5 \cdot 5) + 4(5 \cdot 1) = 50 \text{ cm}^2 + 20 \text{ cm}^2 = 70 \text{ cm}^2$

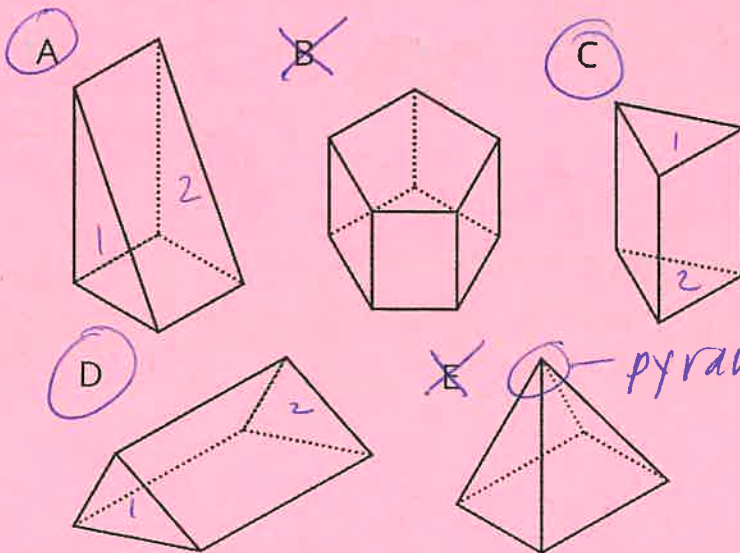


c. Compare the volumes of the prisms and then their surface areas. Does the prism with the greater volume also have the greater surface area?

No  $54 \text{ cm}^2 < 70 \text{ cm}^2$

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



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