

KEY

NAME _____

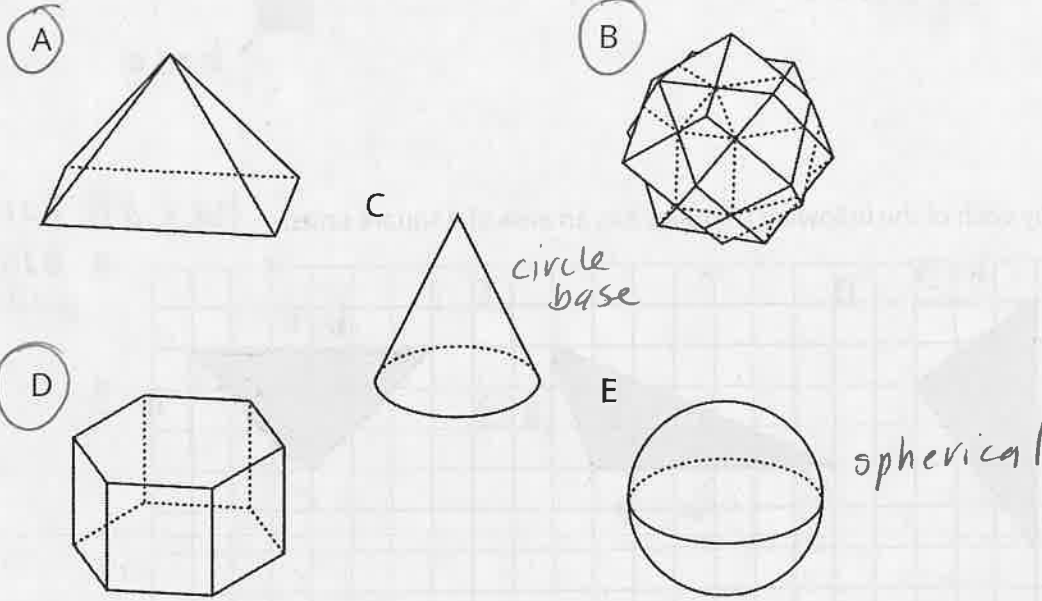
DATE _____

PERIOD _____

Unit 1, Lesson 13

Practice Problems

1. Select all the polyhedra.



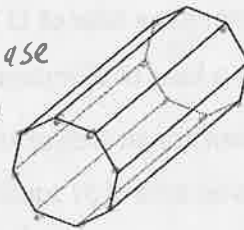
2. a. Is this polyhedron a prism, a pyramid, or neither? Explain how you know.

A pair of identical bases (octagons)

b. How many faces, edges, and vertices does it have?

↓
8 sides
2 bases
10 total

8 on each base
16 total
8 on sides
8 on bottom
8 on top
24 total



3. Tyler said this net cannot be a net for a square prism because not all the faces are squares.

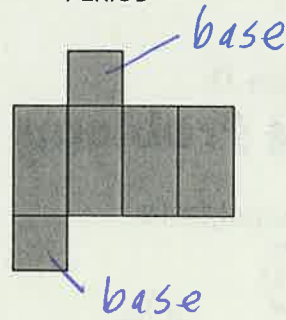
NAME _____

DATE _____

PERIOD _____

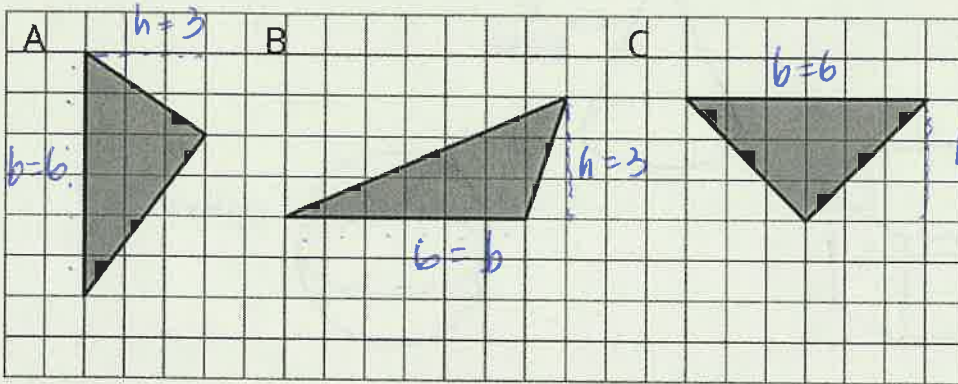
Do you agree with Tyler's statement? Explain your reasoning.

Disagree -
the 2 bases must be
squares and they are



4. Explain why each of the following triangles has an area of 9 square units.

they all have
a base of 6 un
and a height
of 3 un

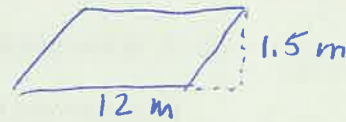


$6 \cdot 3 = 18 \div 2 = 9 \text{ un}^2$

$6 \cdot 3 = 18 \div 2 = 9 \text{ un}^2$

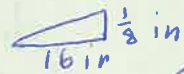
5. a. A parallelogram has a base of 12 meters and a height of 1.5 meters. What is its area?

$12 \times 1.5 = 18 \text{ m}^2$



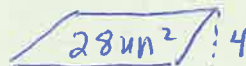
b. A triangle has a base of 16 inches and a height of $\frac{1}{8}$ inches. What is its area?

$(16 \cdot \frac{1}{8}) \div 2 = 1 \text{ in}^2$



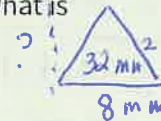
c. A parallelogram has an area of 28 square feet and a height of 4 feet. What is its base?

$28 \div 4 = 7 \text{ feet}$



d. A triangle has an area of 32 square millimeters and a base of 8 millimeters. What is its height?

$(8 \cdot ?) \div 2 = 32$
 $? = 8 \text{ mm}$



6. Find the area of the shaded region. Show or explain your reasoning.

Area of \triangle
 $14 \cdot 5 \div 2 = 35 \text{ un}^2$
Area of \square
 $2 \cdot 2 = 4 \text{ un}^2$
 35 cm^2
 $- 4 \text{ cm}^2$

 31 cm^2

