*Ker*

NAME                                    DATE                    PERIOD
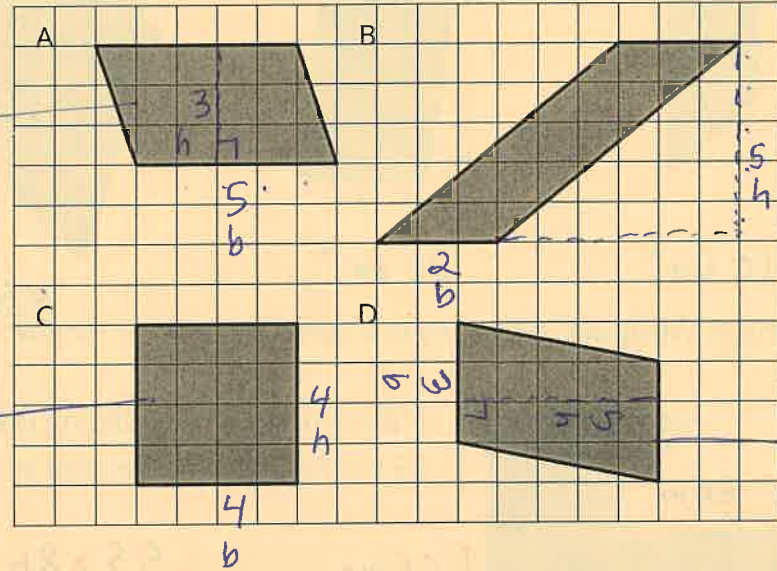
/12

# Unit 1, Lesson 6: Area of Parallelograms

1. Which three of these parallelograms have the same area as each other?

$5 \times 3 =$
$15\,un^2$

$4 \times 4 =$
$16\,un^2$

$3 \times 5 = 15\,un^2$

/3

$3 \times 5 = 15\,un^2$

$A + D + B$

2. Which of the following pairs of base and height produces the greatest area? All measurements are in centimeters.

A. $b = 4, h = 3.5$    $14\,un^2$

B. $b = 0.8, h = 20$    $16\,un^2$

C. $b = 6, h = 2.25$    $13.5\,un^2$

D. $b = 10, h = 1.4$    $14\,un^2$

B is the greatest area

/1

3. Here are the areas of three parallelograms. Use them to find the missing length (labeled with a "?") on each parallelogram. *Picture on back*

A: 10 square units      B: 21 square units      C: 25 square units
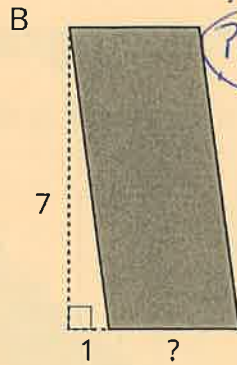
NAME                              DATE                    PERIOD

A          B

$21 = 7x\ ?$
$?= 3un$

C

5

$10un = 5 \times\ ?$

$? = 2un$

5          7          2.5

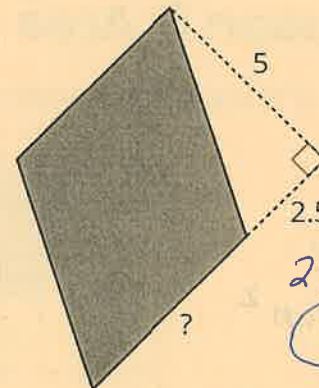$25 = 5 \times\ ?$

$? = 5un$

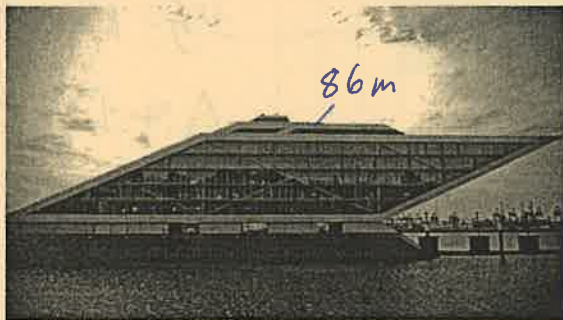$10\ un^2$          $21\ un^2$

?          ?

$25\ un^2$

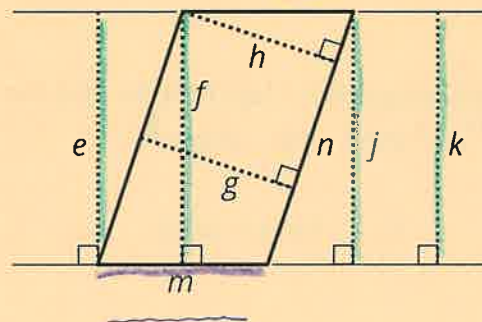**4.** The Dockland Building in Hamburg, Germany is shaped like a parallelogram.

If the length of the building is 86 meters and its height is 55 meters, what is the area of this face of the building?

86m

55m

$55 \times 86 = 4,730 m^2$

**5.** Select **all** segments that could represent a corresponding height if the side $m$ is the base.

have to be perpendicular to m   so e, f, j, k

e    f    h    n  j    k

g

m

(from Unit 1, Lesson 5)

**6.** Find the area of the shaded region. All measurements are in centimeters. Show your reasoning. Skip