Name _____ Class _____ Date _____

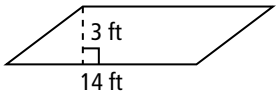
Practice

Form G

Areas of Parallelograms and Triangles

Find the area of each parallelogram.

1.



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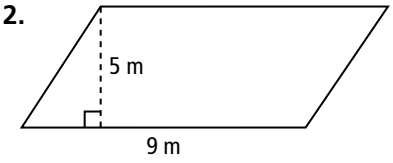

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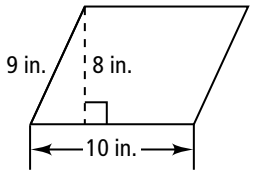

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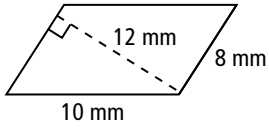

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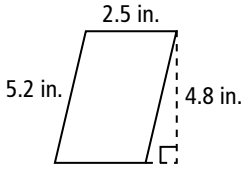

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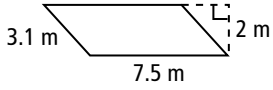
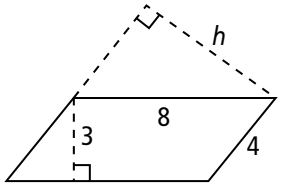


Find the value of *h* for each parallelogram.

7.



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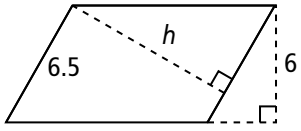

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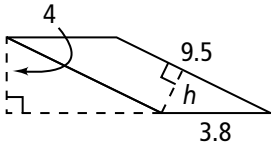
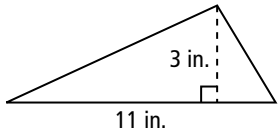


Find the area of each triangle.

10.



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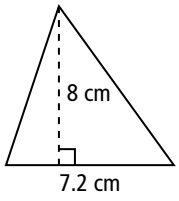

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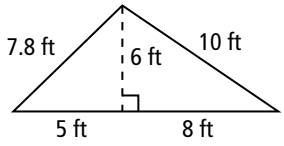

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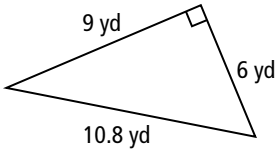

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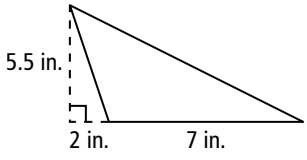

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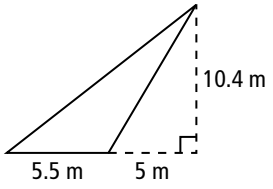


16. Algebra In a parallelogram, a base, *b,* and its corresponding height, *h,* are in the ratio of 5 : 3. The area is 135 mm^2. Find *b* and *h.*

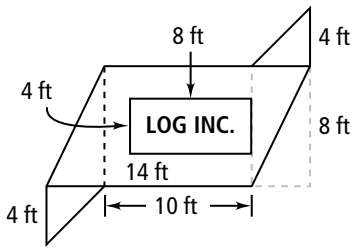
17. Reasoning A triangle has an area of 18 ft^2. List all the possible positive integers that could represent its base and height.

Name _____ Class _____ Date _____

Practice (continued) *Form G*

Areas of Parallelograms and Triangles

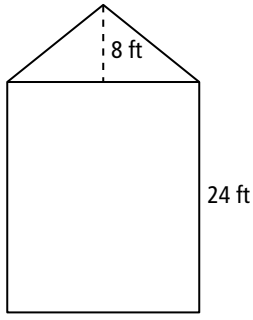
18. A company wants to paint its logo on the side of a building. The entire area needs to be covered with a primer. The two triangular areas will be painted red, the rectangle containing the company's name will be white, and the rest of the parallelogram will be yellow.



a. Find the area for each different color.

b. Find the area that must be painted with primer.

19. A scale drawing of the side view of a house is shown at the right. Find the total area (in square inches) of the side of the house in the drawing.



Scale: 1 in. : 20 ft

20. Open-Ended Using graph paper, draw a figure with area 42 units^2 made up of a parallelogram and a triangle.

Coordinate Geometry Find the area of a polygon with the given vertices.

21. $A(2, 2), B(5, 2), C(3, -1), D(0, -1)$

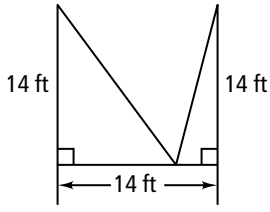
22. $A(1, 4), B(-2, -2), C(-7, -2), D(-4, 4)$

23. $A(5, -3), B(-1, -3), C(-1, 2), D(5, 6)$

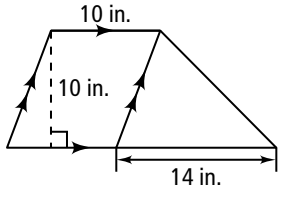
24. $A(5, 0), B(5, 8), C(-1, 7), D(-1, -6)$

Find the area of each figure.

25.



26.



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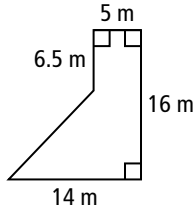

28. Reasoning A parallelogram has a height of 6 units and a corresponding base of 7 units. What is the area of each triangle formed when one diagonal of the parallelogram is drawn? What is the area of each small triangle formed when two diagonals are drawn?

29. A parallelogram has sides 24 m and 5 m. The height corresponding to a 24-m base is 4 m. What it the height corresponding to a 5-m base?