

10-2

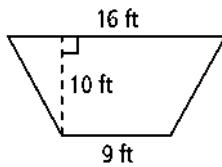
Practice

Form G

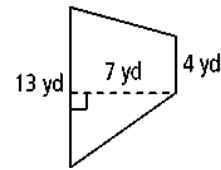
Areas of Trapezoids, Rhombuses, and Kites

Find the area of each trapezoid.

1.



3.

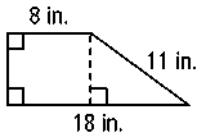


4. Find the area of a trapezoid with bases 20 cm and 14 cm and height 5 cm.

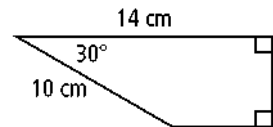
5. Find the area of a trapezoid with bases 8 in. and 7 in. and height 5.2 in.

Find the area of each trapezoid. If your answer is not an integer, leave it in simplest radical form.

6.

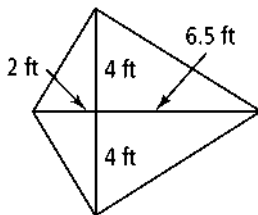


8.

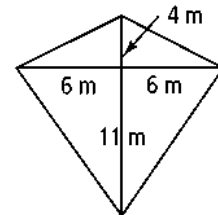


Find the area of each kite.

9.



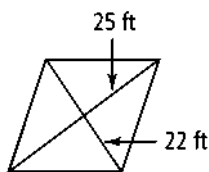
11.



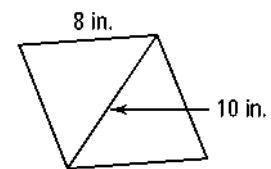
12. Find the area of a kite with diagonals 12 ft and 3 ft.

Find the area of each rhombus.

14.



16.



18. Find the area of a rhombus with diagonals 4.5 in. and 5.2 in.

10-2

Practice (continued)

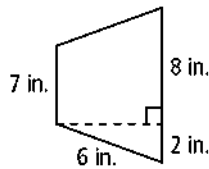
Form G

Areas of Trapezoids, Rhombuses, and Kites

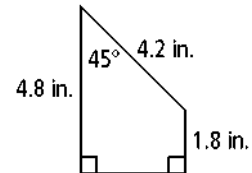
20. A trapezoid has two right angles, 16 in. and 20 in. bases, and 5 in. height. Sketch the trapezoid and find its perimeter and area.

Find the area of each trapezoid to the nearest tenth.

21.

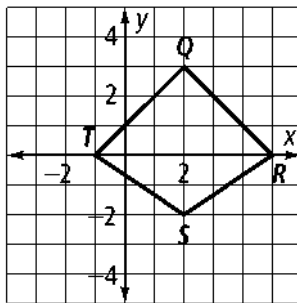


23.

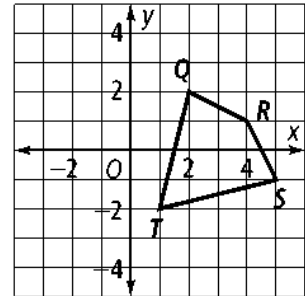


Coordinate Geometry Find the area of quadrilateral $QRST$.

24.



26.

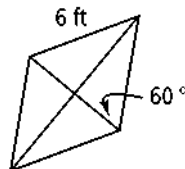


27. **Coordinate Geometry** Graph the lines $y = x - 2$, $y = -x + 2$, $y = 2x - 10$, and $y = -2x - 2$. What type of quadrilateral do the lines form? Find the area of the quadrilateral.

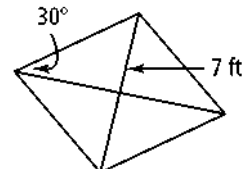
28. **Algebra** One diagonal of a rhombus is 5 less than twice the other diagonal. The area is 75 cm^2 . Find the length of each diagonal.

Find the area of each rhombus. Leave your answer in simplest radical form.

29.



31.



32. Trapezoid $QRST$ has two right angles. A 5 in. altitude can be drawn dividing $QRST$ into a rectangle and an isosceles right triangle. The longer side of the rectangle measures 9 in. What is the area of the trapezoid?

33. In isosceles trapezoid $EFGH$, $\overline{FG} \parallel \overline{EH}$, $FG = 10$, $GH = 12$, and $m\angle E = 60$. Find the area of $EFGH$.