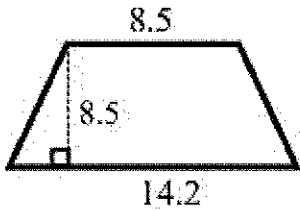


Score: \_\_\_\_\_/12

\_\_\_\_\_/6 Trapezoids – Unless noted otherwise, find the area of the following trapezoids.

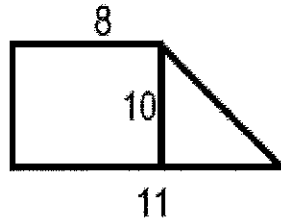
1.

$$\frac{(8.5 + 14.2)}{2} \cdot 8.5$$



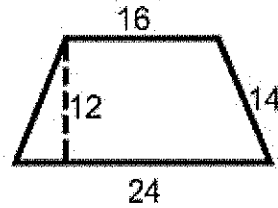
$$96.475$$

2.



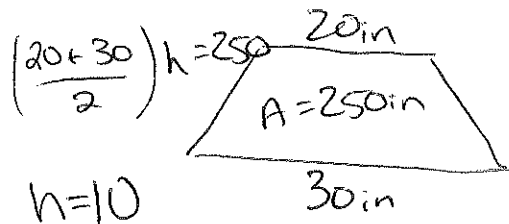
$$95$$

3.

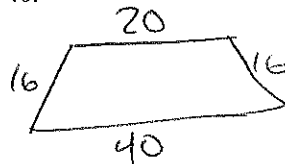


$$240$$

4. Upper base = 20in, lower base = 30in and area of trapezoid = 250 in<sup>2</sup>. Find the height.

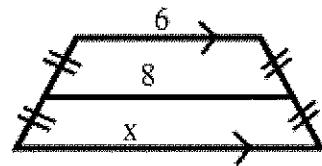


5. Find the median of an isosceles trapezoid with sides 16, 20, 16 and 40.



$$\frac{20 + 40}{2} = 30$$

6. Find the value of x.

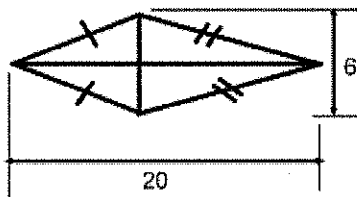


$$x = 10$$

\_\_\_\_\_/6 Kite & Rhombus - Find the area of the following kites & rhombi.

7.

$$\frac{6 \cdot 20}{2} = 60$$



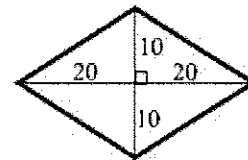
8.

$$\frac{10 \cdot 24}{2} = 120$$

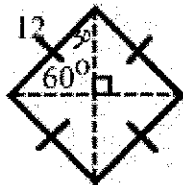


9.

$$\frac{20 \cdot 40}{2} = 400$$

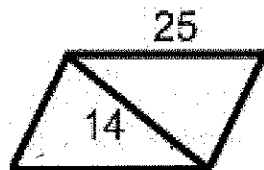


10.



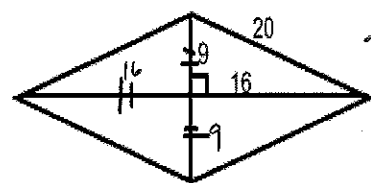
UNSOLVABLE

11. (hint draw the other diagonal)



12.

$$\frac{32 \cdot 18}{2} =$$

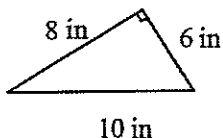


$$288$$

# 11.5: Area of Quadrilaterals

1. What is the area of the triangle?

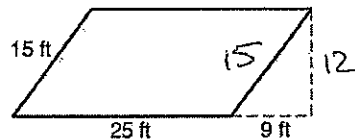
- a. 24 in<sup>2</sup>
- b. 40 in<sup>2</sup>
- c. 48 in<sup>2</sup>
- d. 80 in<sup>2</sup>



$$\frac{6 \cdot 8}{2} =$$

2. What is the area of the parallelogram?

- a. 300 ft<sup>2</sup>
- b. 375 ft<sup>2</sup>
- c. 408 ft<sup>2</sup>
- d. 510 ft<sup>2</sup>



$$25 \cdot 12 =$$

Calculate the area of the shapes below

<p>3.</p> $\frac{18 \cdot 32}{2} = 288$	<p>4.</p> $\frac{10 \cdot 24}{2} = 120 \text{ in}^2$	<p>5.</p> $\left(\frac{8+14}{2}\right) 5 = 55 \text{ cm}^2$
<p>6.</p> <p>IAN  <math>40 = \frac{x}{7} = 5.87</math></p> $\frac{11.74 \cdot 9}{2} = 105.66 \text{ cm}^2$ <p><u>52.83 cm<sup>2</sup></u></p>	<p>7.</p> $\frac{25+17}{2} \cdot 6$ <p>126 ft<sup>2</sup></p>	<p>8.</p> <p><math>\sin 50 = \frac{x}{9}</math></p> <p><math>x = 6.89 \text{ m}</math></p> <p><math>15 \cdot 6.89 = 103.35 \text{ m}^2</math></p>
<p>9.</p> $11 \cdot 4\sqrt{3} =$ $44\sqrt{3} \text{ or}$ $\approx 76.21$	<p>10.</p> $\frac{10+18}{2} \cdot 6\sqrt{3}$ $84\sqrt{3} \text{ or}$ $145.49 \text{ cm}^2$	<p>11.</p> $\frac{12.5+7.5}{2} \cdot 2.5$ <p>25 u<sup>2</sup></p>