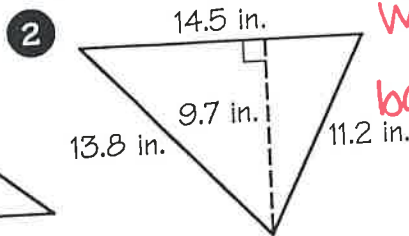
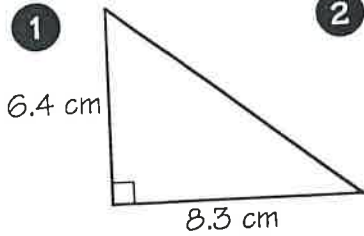


# What Did the Scientist Say to the Hydrogen Atom That Claimed to Have Lost an Electron?

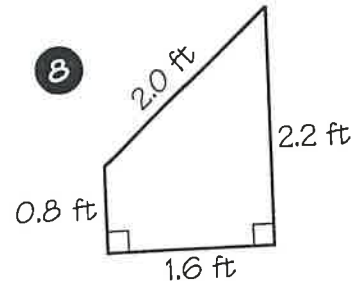
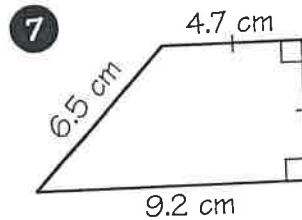
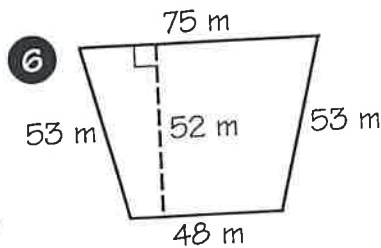
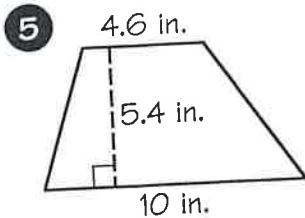
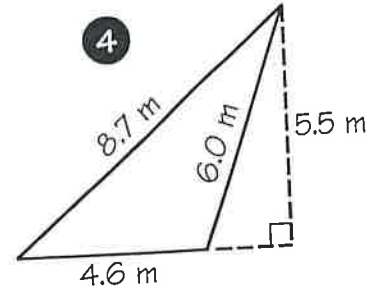
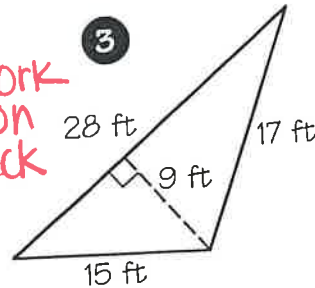


Cross out the letters above each correct answer (some are rounded). When you finish, write the remaining letters in the spaces at the bottom of the page.

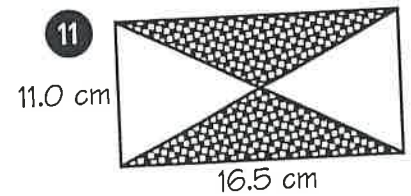
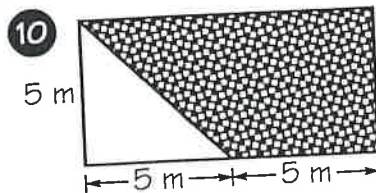
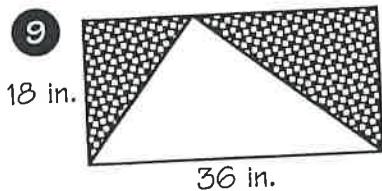
Find the area of the triangle or trapezoid.



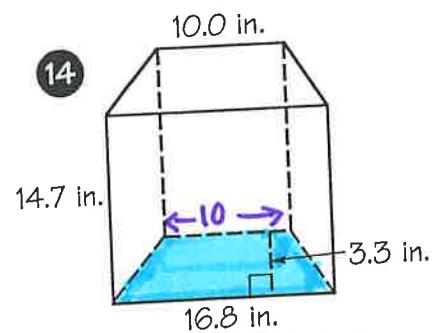
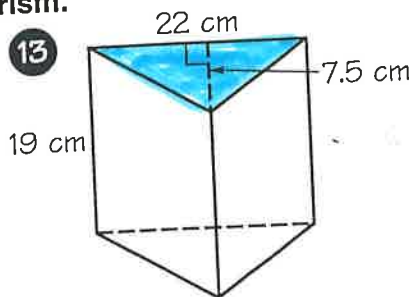
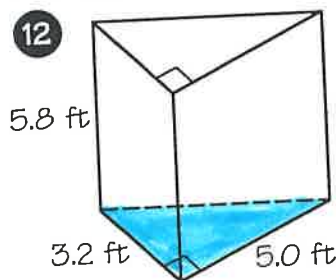
See  
WORK  
on  
back



Find the area of the shaded region inside each rectangle.



Find the area of the base of each prism.



<del>ST</del> 8 ft <sup>2</sup>	<del>AT</del> 3198 m <sup>2</sup>	<del>OM</del> 126 ft <sup>2</sup>	AR 6.8 ft <sup>2</sup>	<del>CH</del> 2.4 ft <sup>2</sup>	<del>TH</del> 44.2 in. <sup>2</sup>	EY 86.5 cm <sup>2</sup>
<del>IF</del> 37.5 m <sup>2</sup>	OU 333 in. <sup>2</sup>	<del>ND</del> 26.6 cm <sup>2</sup>	<del>TO</del> 82.5 cm <sup>2</sup>	PO 41.6 in. <sup>2</sup>	<del>LE</del> 70.3 in. <sup>2</sup>	<del>AN</del> 32.7 cm <sup>2</sup>
SI 29.4 cm <sup>2</sup>	<del>TA</del> 324 in. <sup>2</sup>	<del>KE</del> 39.4 in. <sup>2</sup>	TI 36.3 m <sup>2</sup>	<del>LO</del> 90.8 cm <sup>2</sup>	VE 3245 m <sup>2</sup>	<del>ME</del> 12.7 m <sup>2</sup>

Are you positive?

# Key


## What Did the Scientist Say to the Hydrogen Atom That Claimed to Have Lost an Electron?

You must show a minimum of 3 steps for every problem:

1) write a formula

2) plug in what you know

3) Solve, simplify & label

<p>1.</p> $A = \frac{1}{2}bh$ $= \frac{1}{2}(8.3)(6.4)$ $= 26.6 \text{ cm}^2$	<p>2.</p> $A = \frac{1}{2}bh$ $= \frac{1}{2}(14.5)(9.7)$ $= 70.3 \text{ in}^2$	<p>3.</p> $A = \frac{1}{2}b \cdot h$ $= \frac{1}{2}(28)(9)$ $= 126 \text{ ft}^2$
<p>4.</p> $A = \frac{1}{2}bh$ $= \frac{1}{2}(4.6)(5.5)$ $= 12.7 \text{ M}^2$	<p>5.</p> $A = \frac{1}{2}(b_1 + b_2)h$ $= \frac{1}{2}(4.6 + 10)(5.4)$ $= \frac{1}{2}(14.6)(5.4)$ $= 39.4 \text{ in}^2$	<p>6.</p> $A = \frac{1}{2}(b_1 + b_2)h$ $= \frac{1}{2}(75 + 48)(52)$ $= \frac{1}{2}(123)(52)$ $= 3198 \text{ M}^2$
<p>7.</p> $A = \frac{1}{2}(b_1 + b_2)h$ $= \frac{1}{2}(4.7 + 9.2)(4.7)$ $= \frac{1}{2}(13.9)(4.7)$ $= 32.7 \text{ cm}^2$	<p>8.</p> $A = \frac{1}{2}(b_1 + b_2)h$ $= \frac{1}{2}(2.2 + 8)(1.6)$ $= \frac{1}{2}(3)(1.6)$ $= 2.4 \text{ ft}^2$	<p>9. HINT: find the area of the rectangle and subtract the area of the triangle.</p> $A_{\text{rect}} = b \cdot h$ $(18)(36)$ $= 648$ $A_{\text{tri}} = \frac{1}{2}bh$ $= \frac{1}{2}(36)(18)$ $= 324$ <p>shaded area:</p> $648 - 324 = 324 \text{ in}^2$
<p>10. HINT: find the area of the rectangle and subtract the area of the triangle.</p> $A = \frac{1}{2}(b_1 + b_2)h$ $= \frac{1}{2}(5 + 10)(5)$ $= \frac{1}{2}(15)(5)$ $= 37.5 \text{ M}^2$	<p>11. HINT: find the area of the rectangle and subtract the area of the 2 triangles.</p> $A = \frac{1}{2}(b \cdot h) \times 2$ $= \frac{1}{2}(10.5)(5.5) \times 2$ $= 90.8 \text{ cm}^2$	<p>12. What shape is the base? <u>triangle</u></p> $A = \frac{1}{2}bh$ $= \frac{1}{2}(5)(3.2)$ $= 8 \text{ ft}^2$
<p>13. What shape is the base? <u>triangle</u></p> $A = \frac{1}{2}bh$ $= \frac{1}{2}(22)(7.5)$ $= 82.5 \text{ cm}^2$	<p>14. What shape is the base? <u>trapezoid</u></p> $A = \frac{1}{2}(b_1 + b_2)h$ $= \frac{1}{2}(10 + 16.8)(3.3)$ $= \frac{1}{2}(26.8)(3.3)$ $= 44.2 \text{ in}^2$	 <p>I don't trust atoms. I heard they make up everything!</p>