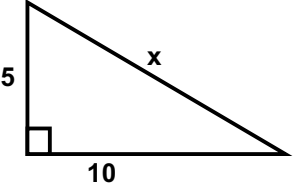
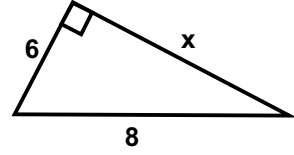
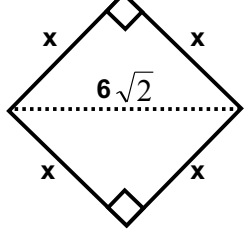
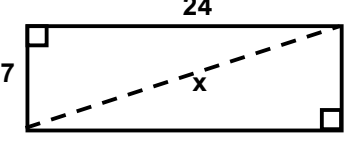


Unit 4 Bundle 11 Test Review

PART 1. PYTHAGOREAN THEOREM

For each of the following, find the value of 'x' in simplest radical form.

<p>_____ 1.</p>	
<p>_____ 2.</p>	
<p>_____ 3.</p>	
<p>_____ 4.</p>	
<p>_____ 5.</p>	<p>A rectangle has a diagonal of 2 cm and a length of 1.5 cm. Find its width to the nearest tenth.</p>
<p>_____ 6.</p>	<p>Find the length of a diagonal of a square with a perimeter of 16.</p>

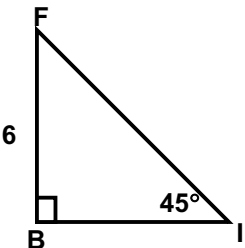
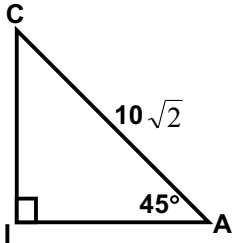
PART 2. CONVERSE OF THE PYTHAGOREAN THEOREM

Tell whether a triangle with sides of given lengths can be formed, and if so, classify it as acute, right, or obtuse.

7. Can a triangle be formed? YES or NO Classification:	Side lengths: 9, 9, and 3
8. Can a triangle be formed? YES or NO Classification:	Side lengths: 8, $8\sqrt{3}$, 16
9. Can a triangle be formed? YES or NO Classification:	Side lengths: 11, 11, 15
10. Can a triangle be formed? YES or NO Classification:	Side lengths: 8, 14, 22

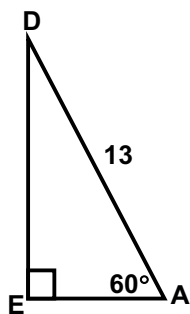
PART 3. 45°-45°-90° & 30°-60°-90° TRIANGLES

For each of the following, find the indicated lengths.

11. $FI =$ _____ $BI =$ _____	 <p>A right-angled triangle with vertices F, I, and B. The right angle is at vertex B. The side FB is vertical and labeled with the length 6. The side BI is horizontal. The angle at vertex I is labeled 45°.</p>
12. $CI =$ _____ $IA =$ _____	 <p>A right-angled triangle with vertices C, I, and A. The right angle is at vertex I. The side CI is vertical. The side IA is horizontal. The hypotenuse CA is labeled with the length $10\sqrt{2}$. The angle at vertex A is labeled 45°.</p>

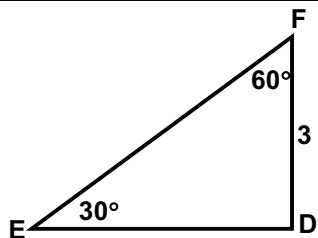
13. DE = _____

EA = _____



14. FE = _____

ED = _____

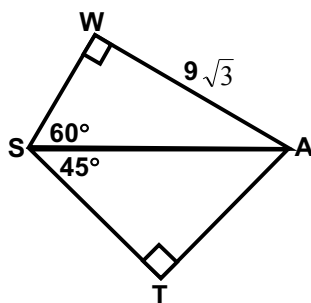


15. SW = _____

SA = _____

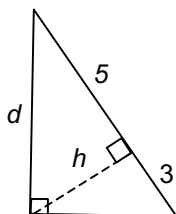
ST = _____

TA = _____

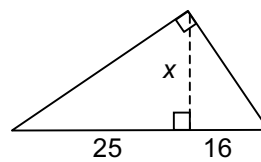


Find the values of the variables.

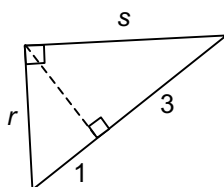
16)



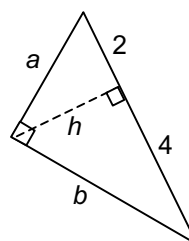
17)



18)



19)



A Mishmash of Answers:

9, 18, $9\sqrt{2}$, $9\sqrt{2}$

20

6

1.32

Yes, acute

$6.5\sqrt{3}$, 6.5

10, 10

$5\sqrt{5}$

2, $2\sqrt{3}$

30°

No

$4\sqrt{7}$

$4\sqrt{2}$

3

$2\sqrt{10}$, $\sqrt{15}$

$2\sqrt{2}$, $2\sqrt{3}$, $2\sqrt{6}$

Yes, right

6, $3\sqrt{3}$

11.5

25

Yes, acute

$6\sqrt{2}$; 6

26

13