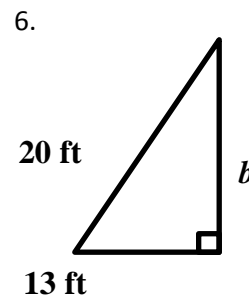
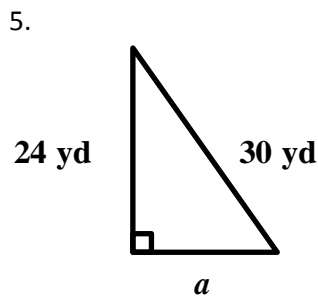
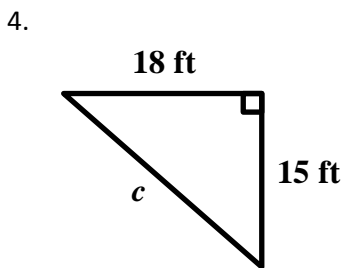
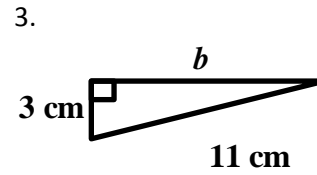
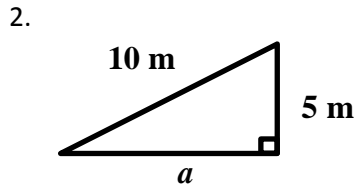
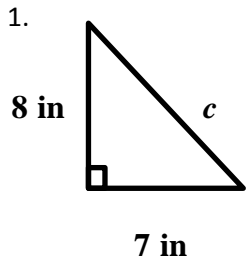


Name: _____ Period: _____

Score:
_____ / _____

HW 7-5: Pythagorean Theorem

Write an equation you could use to find the length of the missing side of each right triangle. Then find the missing length. Write your answers as simplified radicals.



7. $a = 1\text{m}$, $b = 3\text{m}$

8. $a = 2\text{in}$, $c = 5\text{in}$

9. $b = 4\text{ft}$, $c = 7\text{ft}$

10. $a = 4\text{km}$, $b = 9\text{km}$

11. $a = 10\text{yd}$, $c = 18\text{yd}$

12. $b = 18\text{ft}$, $c = 20\text{ft}$

13. $a = 5\text{yd}$, $b = 11\text{yd}$

14. $a = 12\text{cm}$, $c = 16\text{cm}$

15. $b = 22\text{m}$, $c = 25\text{m}$

16. $a = 21\frac{1}{2}\text{ft}$, $b = 72\frac{1}{4}\text{ft}$

17. $a = 36.2\text{yd}$, $c = 60.3\text{yd}$

18. $b = 25.7\text{mm}$, $c = 65\frac{1}{2}\text{mm}$

Determine whether each triangle with sides of given lengths is a right triangle. Justify your answer with an equation.

19. 10yd , 15yd , 20yd

20. 21ft , 28ft , 35ft

21. 7yd , 14yd , 16yd

22. 40m , 42m , 58m

23. 24in , 32in , 38in

24. 15mm , 18mm , 24mm