

Key

Exercise Set 10.4

Express each square root in its simplest form.

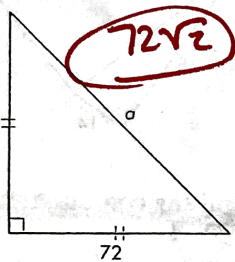
1. $\sqrt{90}$ $3\sqrt{10}$ 2. $\sqrt{96}$ $4\sqrt{6}$ 3. $\sqrt{120}$ $2\sqrt{30}$ 4. $\sqrt{185}$ $\sqrt{185}$ 5. $\sqrt{490}$ $7\sqrt{10}$
 6. $\sqrt{576}$ 24 7. $\sqrt{720}$ $12\sqrt{5}$ 8. $\sqrt{722}$ $19\sqrt{2}$ 9. $\sqrt{784}$ 28 10. $\sqrt{828}$ $26\sqrt{3}$

Express each product in its simplest form.

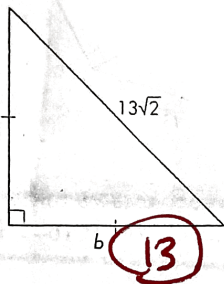
11. $(2\sqrt{2})^2$ 8 12. $(4\sqrt{3})^2$ 48 13. $(5\sqrt{5})(\sqrt{3})$ $5\sqrt{15}$ 14. $(2\sqrt{6})(\sqrt{12})$ $12\sqrt{2}$ 15. $(6\sqrt{8})^2$ 288

Solve Exercises 16-30 by using your new conjectures. In most of the exercises, you don't need to use the Pythagorean Theorem. All measurements are in centimeters.

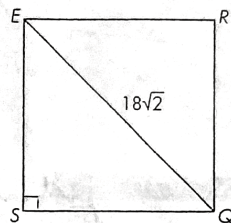
16. $a = ?$



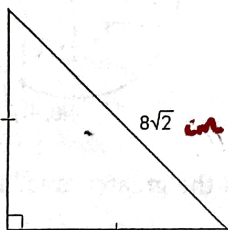
17. $b = ?$



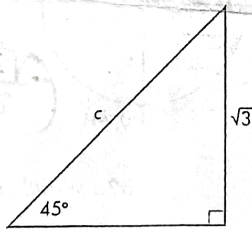
18. What is the perimeter of square SQRE?



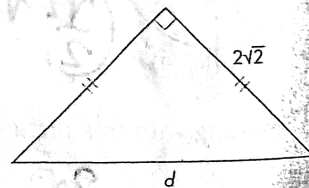
19. What is the area of the triangle?



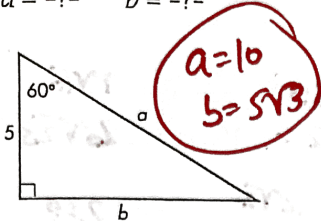
20. $c = ?$



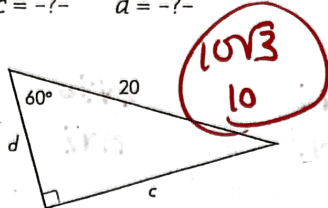
21. $d = ?$



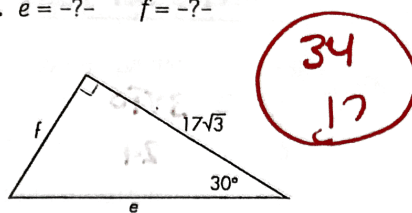
22. * $a = -?$ $b = -?$



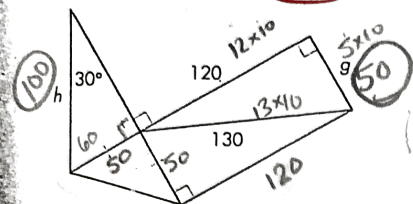
23. $c = -?$ $d = -?$



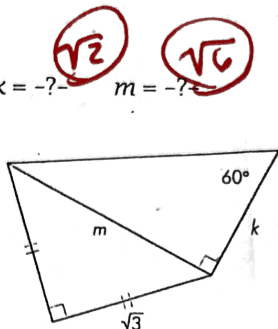
24. $e = -?$ $f = -?$



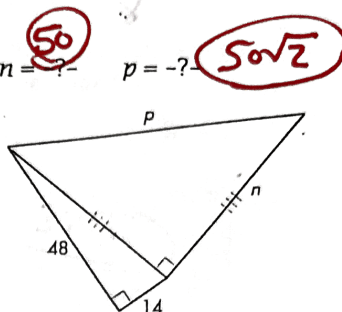
25. $g = -?$ $h = -?$



26. * $k = -?$ $m = -?$

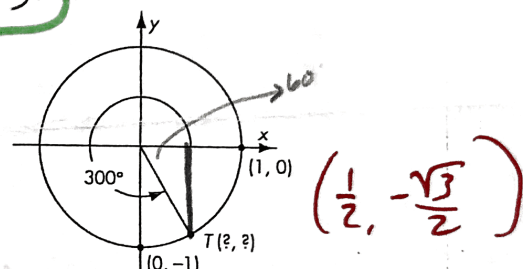
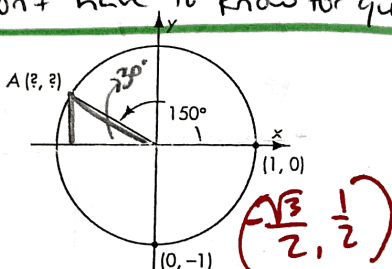
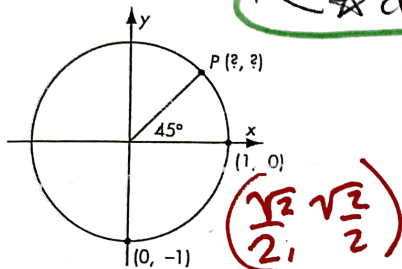


27. $n = -?$ $p = -?$

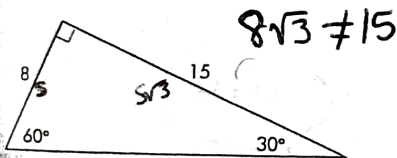


28. Find the coordinates of P. 29. Find the coordinates of A. 30. Find the coordinates of T.

★ don't have to know for quiz ★

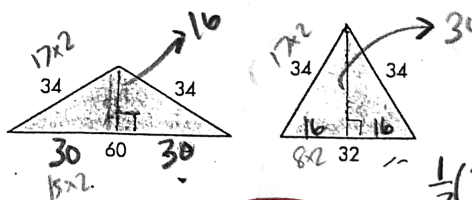


31. What's wrong with this picture?



Does not follow 30-60-90
 $17 \neq 2(8)$

32. Which triangle has the greater area? Explain.



$\frac{1}{2}(60)(16) = 480$
 $\frac{1}{2}(32)(30) = 480$
 Neither equal area