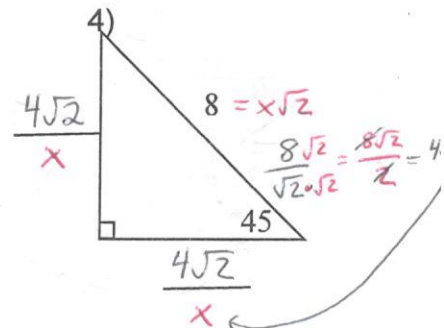
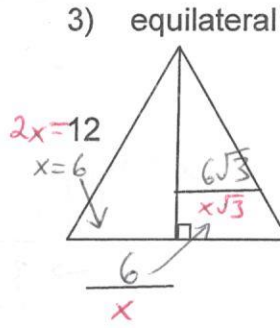
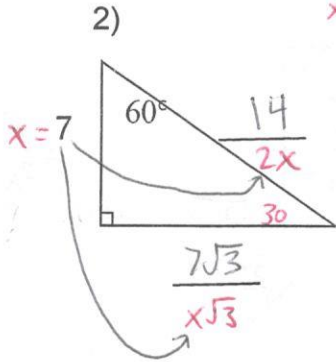
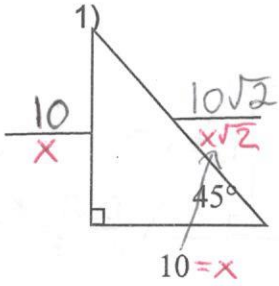
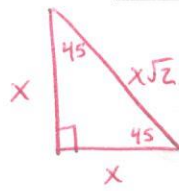
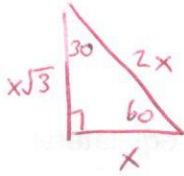
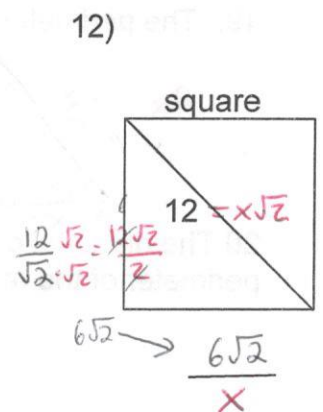
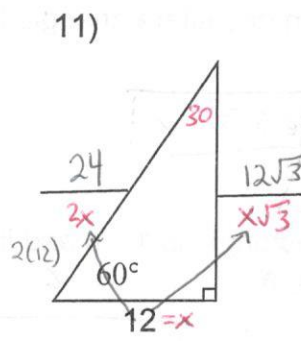
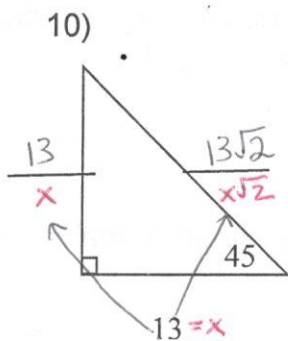
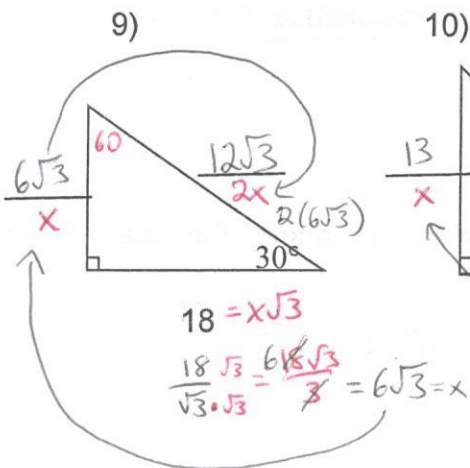
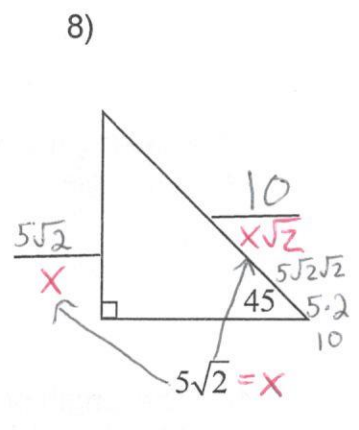
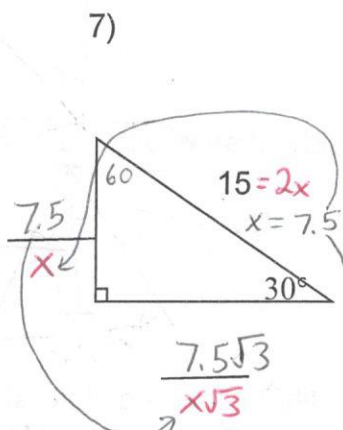
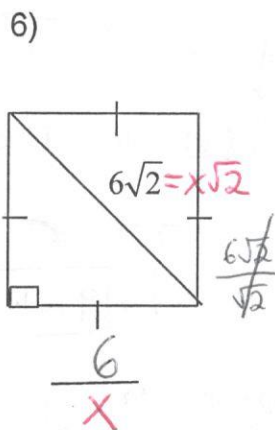
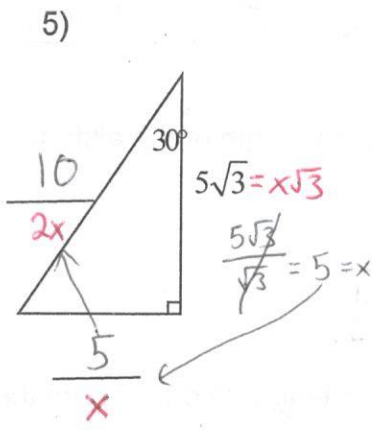


Special Rt Triangle Worksheet 3

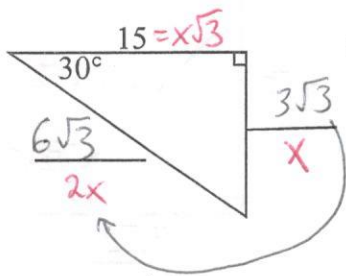
Name Key Per _____



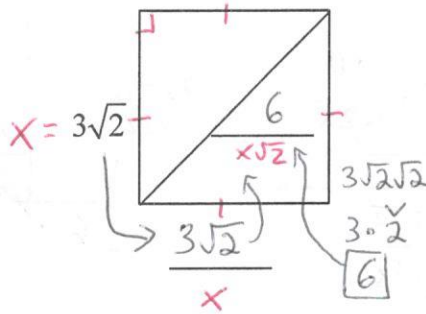
ANSWERS TO THE QUIZ



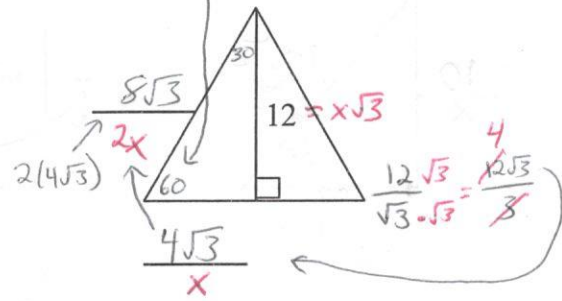
13) $\frac{15\sqrt{3}}{\sqrt{3} \cdot \sqrt{3}} = \frac{15\sqrt{3}}{3} = 3\sqrt{3} = x$



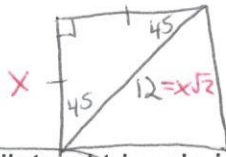
14) square



15) equilateral

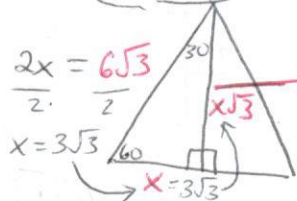


16. The length of the diagonal of a square is 12 inches. Find the length of one side of the square.



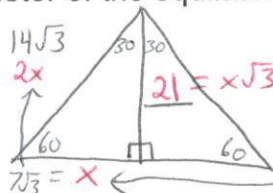
$$x = \frac{12\sqrt{2}}{\sqrt{2} \cdot \sqrt{2}} = \frac{12\sqrt{2}}{2} = 6\sqrt{2} \text{ in}$$

17. The length of one side of an equilateral triangle is $6\sqrt{3}$ meters. Find the length of the altitude of the triangle.



$$3\sqrt{3}\sqrt{3} = 3 \cdot 3 = 9 \text{ meters}$$

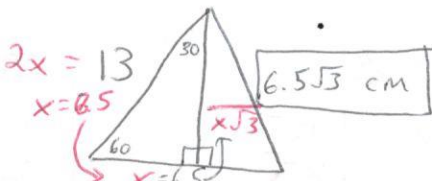
18. The length of the altitude of an equilateral triangle is 21 feet. Find the length of one side of the equilateral triangle. What is the perimeter of the equilateral triangle?



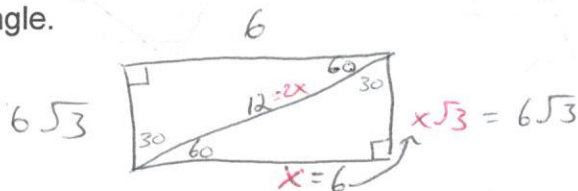
$$x = \frac{21 \cdot \sqrt{3}}{\sqrt{3} \cdot \sqrt{3}} = \frac{21\sqrt{3}}{3} = 7\sqrt{3} \times 2 = 14\sqrt{3}$$

$14\sqrt{3} \times 3 \text{ sides} = 42\sqrt{3} \text{ ft}$

19. The perimeter of an equilateral triangle is 39 cm. Find the length of the altitude of the triangle.



20. The diagonal of a rectangle is 12 in and intersect at an angle to make a 60° angle. Find the perimeter of the rectangle.



$$12 + 12\sqrt{3} \text{ in}$$