Trigonometry	**Name:** _____
Study Guide 2	**Class:** _____
Due Date: _____	**Score:** _____

No Work ⇔ No Points

Use Pencil Only ⇔ Be Neat & Organized

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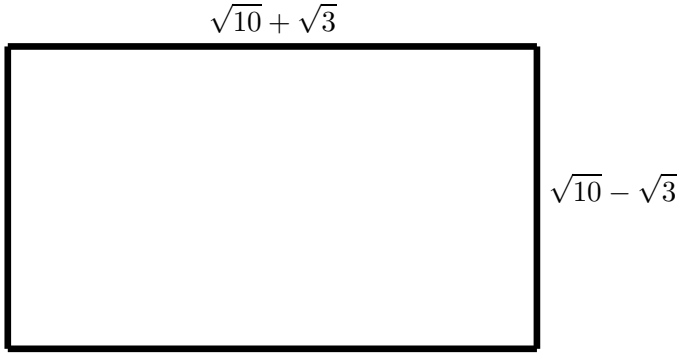
1. (5 points) Find an expression in simplest form for the area and the perimeter of the shape below.



1. _____

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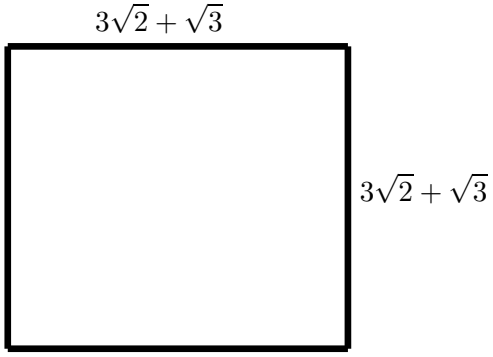
2. (5 points) Find an expression in simplest form for the area and the perimeter of the shape below.



2. _____

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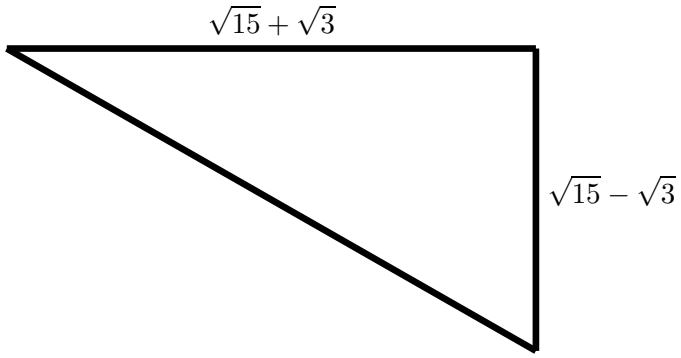
3. (6 points) Find the measure of the hypotenuse of the shape below in simplest form.



3. _____

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4. (3 points) Simplify: $\sqrt[3]{(2x-3)^3}-\left(\sqrt[5]{3x-5}\right)^5+(\sqrt{x}+\sqrt{2})(\sqrt{x}-\sqrt{2})$

4. _____

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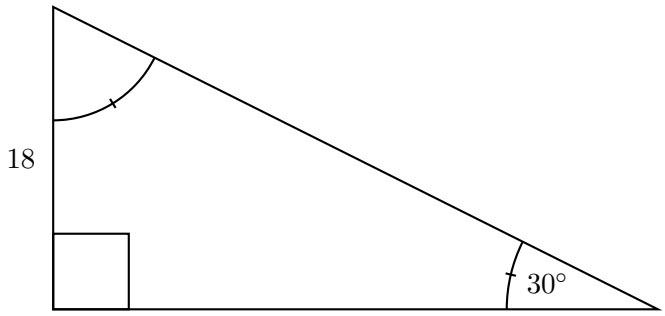
5. (5 points) Find the missing sides and missing angles of the right triangle given below.



5. _____

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6. (3 points) Rationalize the numerator: $\dfrac{\sqrt{10x}}{2x}$

6. _____

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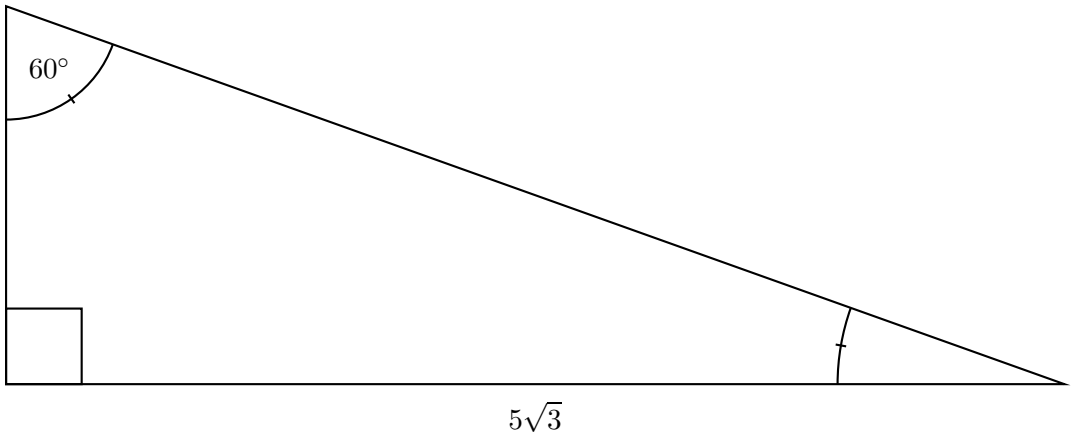
7. (5 points) Find the missing sides and missing angles of the right triangle given below.



7. _____

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8. (4 points) Rationalize the denominator: $\dfrac{2}{\sqrt{5}+\sqrt{3}}$

8. _____

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9. (4 points) Solve and rationalize your final answers: $2x^2 - 1 = 0$

9. _____

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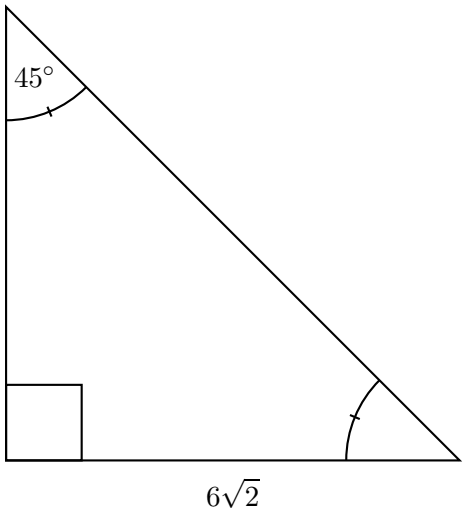
10. (4 points) Find the missing sides and missing angles of the right triangle given below.



10. _____

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11. Algebra Review Problems:

(a) (2 points) Solve $x^2 - 4x - 12 = 0$ **by factoring.**

(a) _____

(b) (2 points) Solve $x^2 - 4x - 12 = 0$ **by the quadratic formula.**

(b) _____

(c) (2 points) Solve $x^2 - 4x - 12 = 0$ **by the completing the square.**

(c) _____
