

1. A rectangle has an area of 1600 cm ² . If the rectangle is a square, what is its perimeter?	1. <u> </u> cm
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2. Coach Popovich only has octopus, cows, and jellyfish on his vineyard to help process the grapes. An octopus has 8 tentacles and 1 head. A jellyfish has 20 tentacles and no head. A cow has 4 legs and 1 head. Coach Pop's animals have a total of 21 heads, 172 tentacles, and 28 legs. How many animals does he have?	2. <u> </u> animals
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3. A wading pool is in the shape of a square. The perimeter of the pool is 28 ft, and the water is 6 in deep. In cubic feet, what is the volume of the water in the pond? Express your answer as a decimal to the nearest tenth.	3. _____ ft ³
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4. A train travels at a constant rate of 55 mph through a tunnel. 45 seconds after the front of the front of the train enters the tunnel, the front of the train exits the tunnel. How many feet long is the tunnel?	4. _____ feet
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5. What is the sum of the cubes of the first 11 positive odd integers?	5. ____
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6. Movie showings begin at 11:35 am. Each showing consists of 10 minutes of previews and 105 minutes of movie. It takes 20 minutes to get the theater ready for the next showing and there are 5 showings of the movie prior to midnight. What is the earliest possible time for the last showing to begin?	6. ____ PM 8:35 PM
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each show $\rightarrow 10 + 105 + 20 = 135$ minutes
 $\times 4$ (showings)

540 minutes
 $\frac{540}{60} = 9$ hours

11:35 + 9 hours
8:35 PM

7. Two angles of a triangle measure 60 and 45 degrees. If the side of the triangle opposite the 60-degree angle measures $5\sqrt{2}$ units, what is the sum of the lengths of the two remaining sides? Express your answer as a decimal to the nearest tenth.

7. _____ units