

Workout 1

1. _____ points

The stem-and-leaf plot shows the scores on Mrs. Norris' last quiz for her third period class. (6|3 represents 63 points.) What was the mean score on this quiz? Express your answer to the nearest whole number.

Quiz Scores	
6	3 5 5
7	1 7 9 9 9 9
8	1 3 4 4 5 9 9
9	0 1 2 2 3 5 8 8

2. \$ _____

Tansy wanted to leave the waiter an 18% tip, and her bill was \$21.50. How much will the total cost of her dinner and tip be if she rounds the tip itself to the next higher dollar?

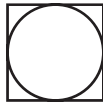
3. _____

What is the largest possible value of x given that $x^3 = 5x$? Express your answer in simplest radical form.

4. _____ cu in

The exterior dimensions of an empty cooler in the shape of a rectangular prism are 18 inches by 18 inches by 24 inches. For insulation, the top, the bottom and each of the four walls are two inches thick. What is the volume of the empty space inside the cooler?

5. _____ sq cm



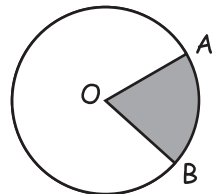
This square has an area of 49 sq cm. What is the area of the inscribed circle? Express your answer as a decimal to the nearest tenth.

6. \$ _____

Joe's Store guarantees that it will refund what you paid for an item and give you an additional 10% if you find the item for less at a different store. Li paid \$137.80 for a DVD player at Joe's Store. Li then found an ad for the same DVD player at Mike's Store for less. How much money should Joe's Store give to Li?

7. _____ degrees

In the circle with center O, the shaded region is 20% of the area of the entire circle. What is the measure of angle AOB?

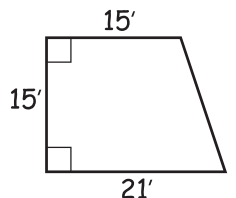


8. _____ degrees

In a triangle with three distinct angle measures, the smallest angle measures 30° . The measures of the other two interior angles are each a whole number of degrees. What is the measure of the largest possible angle in the triangle?

9. \$ _____

A roll of carpet is 15 feet wide. The carpet costs \$20 per square yard. A customer must purchase the carpet in a piece that is 15 feet in width, but the carpet can be cut to any length. Beth wants to use exactly one piece of carpet to cover a floor that is trapezoidal in shape, as shown, rather than putting multiple pieces together. However, she must also pay for any wasted carpet. What is the cost of the shortest length of carpet that she can use?



10. _____

What is the value of x such that $(x, 0)$ is a solution of the equation $y = 3x - 4$? Express your answer as a common fraction.