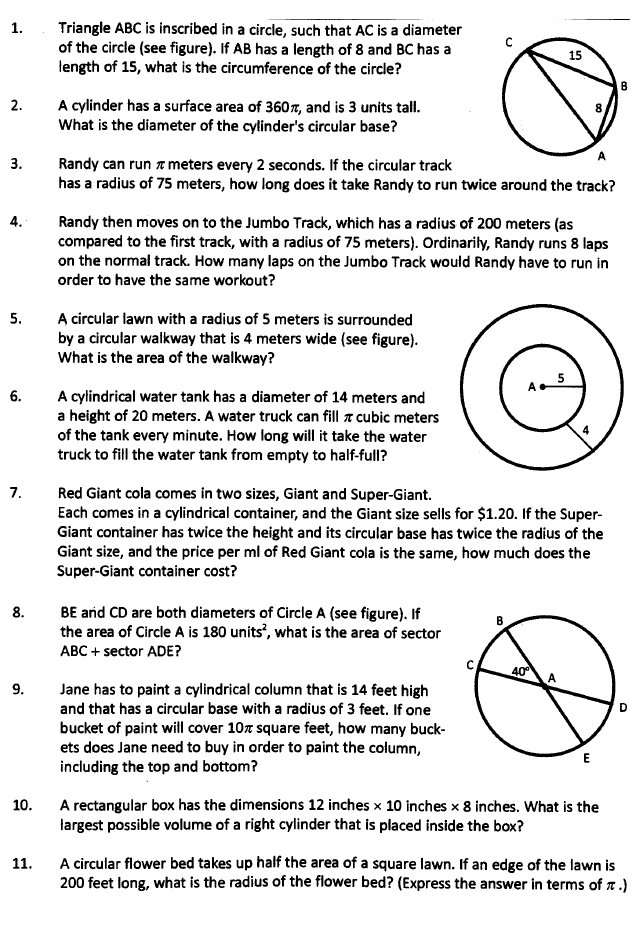
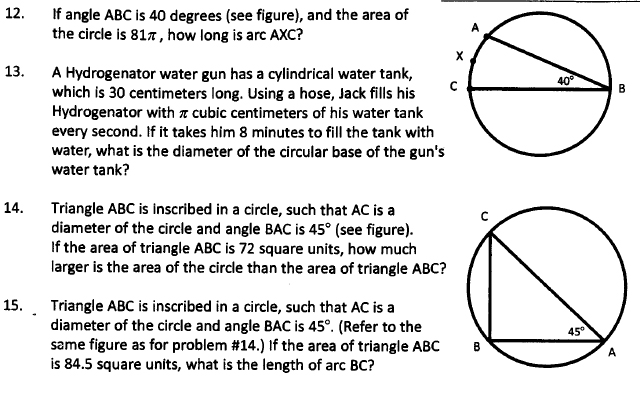
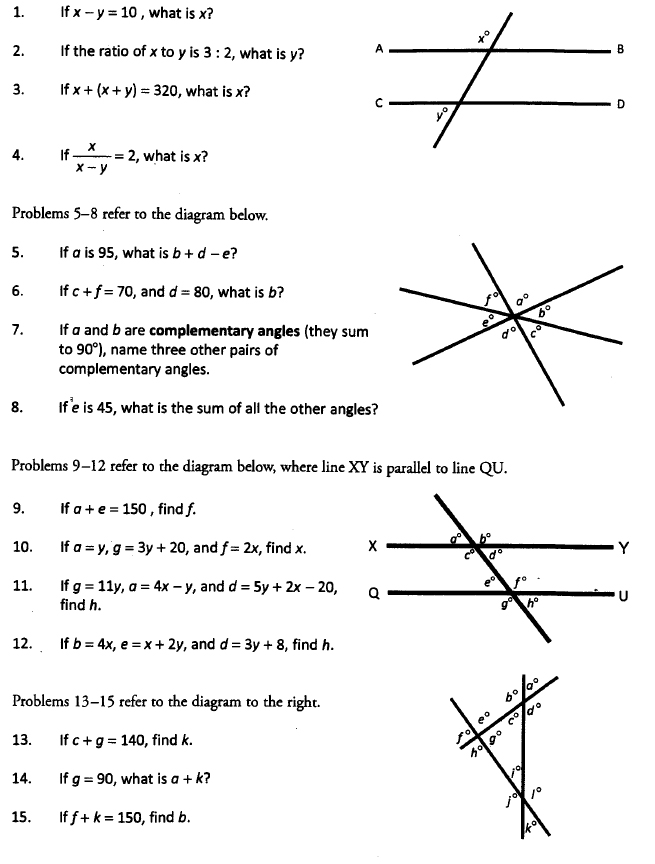
**Circles**

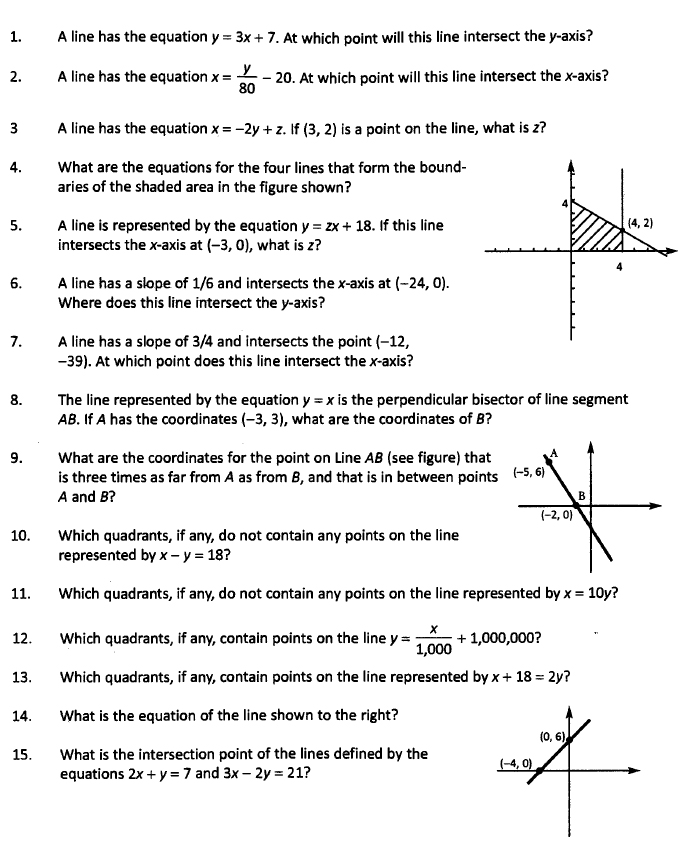
**

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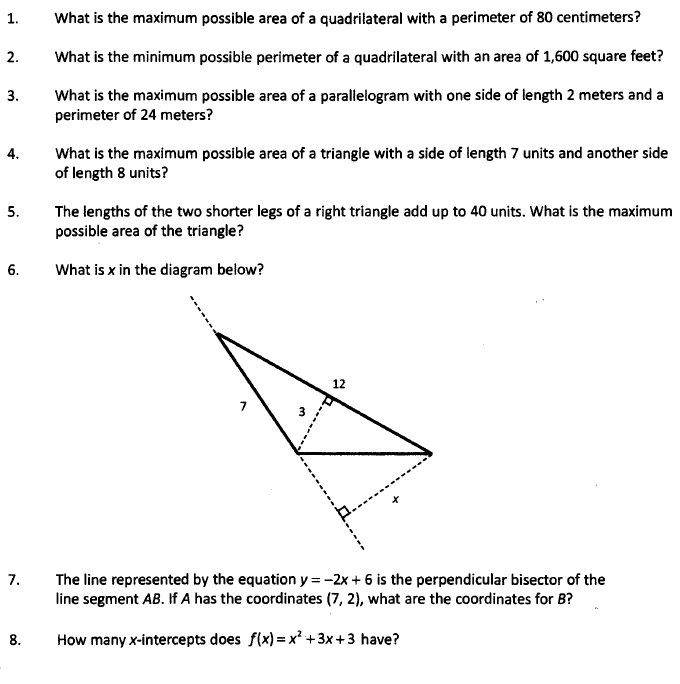
**Lines**

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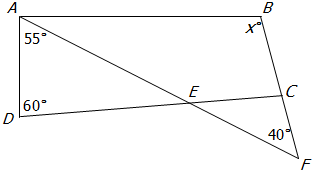
**Coordinate Geometry**

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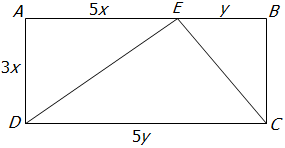
**Some tricky questions**

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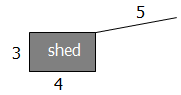
**Miscellaneous Questions**



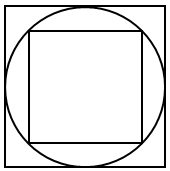
1. In the figure above if AB || CD, what is the value of x?



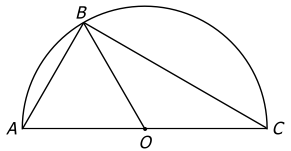
1. If AD = 3x, AE = 5x, EB = y and DC = 5y, what is the ratio of the area of triangle DEC to the area of rectangle ABCD?



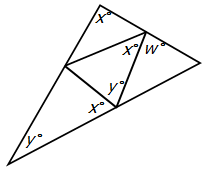
1. A cow is tethered to the corner of a shed. If the length of the rope is 5, and the shed has length 4 and width 3, what is the maximum area that is accessible to the cow? (The cow cannot enter the shed).



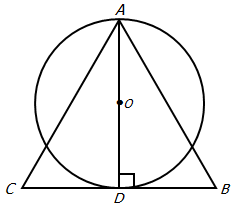
1. In the figure above, if the area of the outer square is [http://math.edim.co/4402fb595cf97f664445cd2f3651440d.png](http://math.edim.co/4402fb595cf97f664445cd2f3651440d.png), then the area of the inner square is
2. If the ratio of the volume of cube A to the volume of cube B is 1 to 8, what is the ratio of the surface area of cube A to the surface area of cube B?



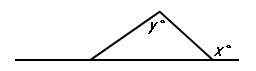
1. In the figure above, O is the center of the semicircle. If angle BCO is 30 and BC = [http://math.edim.co/849e69e3e70e1edfa9b0764a4fe962a5.png](http://math.edim.co/849e69e3e70e1edfa9b0764a4fe962a5.png), what is the area of triangle ABO?
2. In the xy-coordinate system, a circle with radius [http://math.edim.co/f10ac6fceee41bb786d24ee337f02bab.png](http://math.edim.co/f10ac6fceee41bb786d24ee337f02bab.png)and center (2,1) intersects the x-axis at (k ,0). One possible value of k is



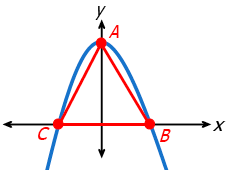
1. For the figure above, what is the value of w in terms of x and y?



1. For the figure above, if the circle with center O has area 9π, what is area of equilateral triangle ABC? (Give your answer to the nearest hundredth)



1. Column A: x   
   Column B: y



1. The figure shows the graph of the equation , where k is a constant. If the area of triangle ABC is 1/8, what is the value of k?