Name: _____ Date Assigned : _____

Advanced Math
Meaningful Distributed Practice

All questions on this page will be worth 3 points: One point for the correct answer, and two points for sufficient work shown to determine your answer.

1. Find the length of the arc cut from a circle of radius 10 cm by the sides of a central angle of 25°

2. Determine the quadrant that the angle $-\frac{22\pi}{9}$ must reside in.

3. Consider a right triangle with angles A, B and C and opposite sides a, b, and c respectively. If C is 90° , find the following rations and express your answers in terms of a, b, and c.

i) sin A ii) tan B iii) csc B

4. Use the same triangle from #3, If $c = 5$ and $b = 1$, find the following ratios. Do not use a calculator. Answers should be expressed in radicals.

i) cos A ii) cot A iii) sec B

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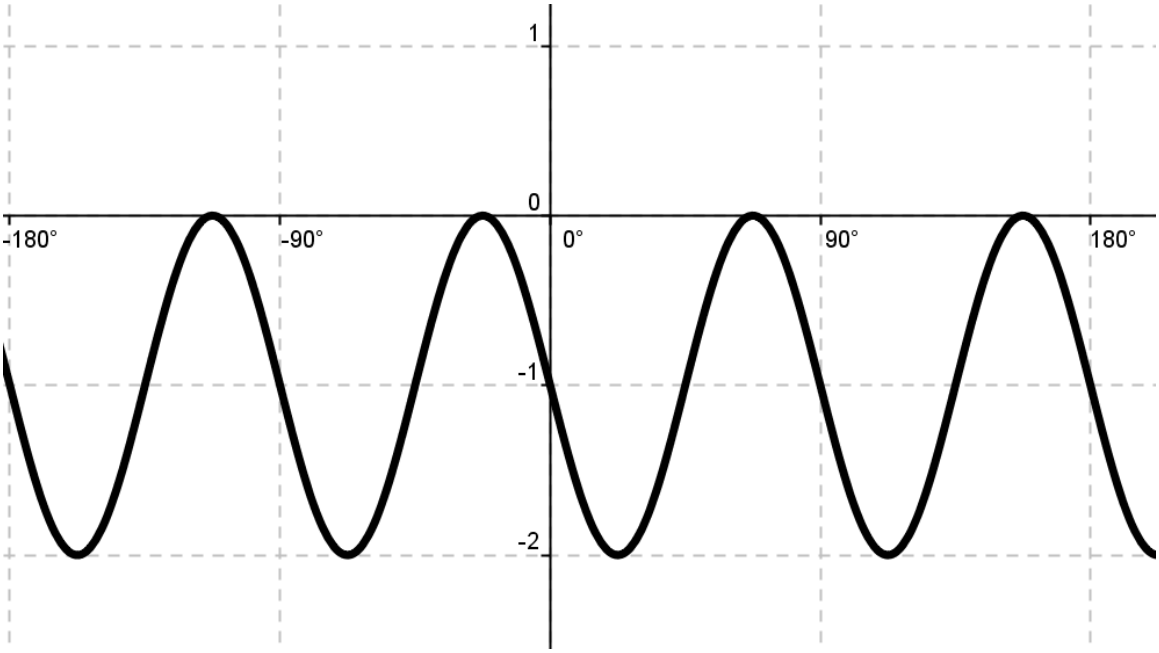
5. In a standard (x, y)-coordinate system a unit circle is drawn, with center at the origin. An angle θ is sketched, in standard position, and its terminal side meets the circle in the point (p, q). What are the sine, cosine, and tangent of θ , in terms of p and q?

6. (5 points)



Based on the above graph, determine the correct values for the graphs:

Amplitude: Vertical Shift: Period:

7. Write an equation that could model the above graph graph:

8. Compute the distance AB shown in the figure, given that θ = 30°