**Chapter 4 Review**

1. Determine the following:

|  |  |
| --- | --- |
| sin 2˚ = \_\_\_\_\_\_\_\_\_ sin 10˚ = \_\_\_\_\_\_\_\_\_ sin 50˚ = \_\_\_\_\_\_\_\_\_ sin 60˚ = ­­­­­­­­­­­\_\_\_\_\_\_\_\_\_  | sin 178˚ = \_\_\_\_\_\_\_\_\_\_ sin 170˚ = \_\_\_\_\_\_\_\_\_\_sin 130˚ = \_\_\_\_\_\_\_\_\_\_sin 120˚ = \_\_\_\_\_\_\_\_\_\_ |
| cos 2˚ = $\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_$ cos 10˚ = \_\_\_\_\_\_\_\_\_ cos 50˚ = ­­­­­­­­­­­\_\_\_\_\_\_\_\_\_ cos 60˚ = ­­­­­­­­­­­\_\_\_\_\_\_\_\_\_  | cos 178˚ = \_\_\_\_\_\_\_\_\_\_ cos 170˚ = \_\_\_\_\_\_\_\_\_\_ cos 130˚ = \_\_\_\_\_\_\_\_\_\_ cos 120˚ = \_\_\_\_\_\_\_\_\_\_ |

**In Summary**: For any angle $θ$

sin $θ$ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

cos $θ$ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Calculate the value(s) for $∠A$  that satisfy each of the equations listed.

 Give your answer to the nearest degree.

a) sin A = 0.6428 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) cos A = 0.4226 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) sin A = 0.9659 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

****3. Given $∠A=35°$ and $b=20cm$ B

a) Determine the height of the triangle to the

**20 cm**

 nearest tenth of a centimeter.

 A

b) Determine and illustrate the number c) Determine and illustrate the number

 of triangles that can be drawn if $a=9cm$. of triangles that can be drawn if $a=25cm$

d) Determine and illustrate the number of triangles that can be drawn if $a=15cm$

4. Determine the measure of $∠A$ to the nearest degree.

5. Given $∠A=50°$ and $b=20cm$

 **If** $a=17$**,** determine the number

**20 cm**

 of triangle (zero, one, or two) that

 are possible for these measurements.

 **Draw the triangle(s)** to support your

 answer. **Determine side *c* and** $∠C$**.**

 A

6. Given $∠A=40°$ and $b=15cm$ and $a=13$**,** determine the number of triangle (zero, one, or two) that are possible for these measurements.

**Draw the triangle(s)** to support your answer. **Determine side *c* and** $∠C$**.**