

PC 6-6 B

Use half-angle formulas to find each of the following:

1) $\sin \frac{\pi}{8}$

2) $\cos \frac{3\pi}{8}$

3) $\tan \frac{7\pi}{8}$

4) $\sec \frac{15\pi}{8}$

5) $\csc \frac{5\pi}{8}$

6) $\cot \frac{9\pi}{8}$

7) **Given:** $\tan A = \frac{3}{4}; \pi \leq A < \frac{3\pi}{2}$. **Draw a triangle, then** find each of the following.

a) $\sin\left(\frac{1}{2}A\right)$

b) $\cos\left(\frac{1}{2}A\right)$

c) $\tan\left(\frac{1}{2}A\right)$

Use half angle formulas to find each of the following.

8) $\cos\left(\frac{1}{2}\tan^{-1}\frac{2}{3}\right)$

9) $\tan\left(\frac{1}{2}\cos^{-1}\frac{5}{13}\right)$

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