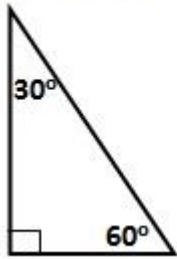


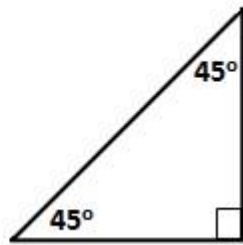
## Trig Angles - Day 2

Remember for last day's note:

**30-60-90 Triangle**



**45-45-90 Triangle**



Determine the exact trig ratio for:

- (a)  $\sin 315^\circ$
- (b)  $\cos 240^\circ$
- (c)  $(\sin 30^\circ)(\cos 60^\circ)$
- (d)  $(\cos 30^\circ)(\sin 60^\circ) - \tan 45^\circ$
- (e)  $(\sin^2 30^\circ)(\cos^2 30^\circ)$

### ***Determining the Exact Trig Ratio with a Point on the Terminal Arm***

We can also determine the exact trig ratios of other angles, not just our special angles. However, in order to determine the exact ratios we need different information.

1. (a) Determine the exact primary trig ratios for an angle in standard position with a terminal arm that passes through the point (3,8).  
(b) Determine the related acute angle  $\beta$   
(c) Determine the principal angle  $\theta$
2. (a) Determine the exact primary trig ratios for an angle in standard position with a terminal arm that passes through the point (4,-7).  
(b) Determine the related acute angle  $\beta$   
(c) Determine the principal angle  $\theta$
3. (a) Determine the exact primary trig ratios for an angle in standard position with a terminal arm that passes through the point (2,-6).  
(b) Determine the related acute angle  $\beta$   
(c) Determine the principal angle  $\theta$
4. (a) Determine the exact primary trig ratios for an angle in standard position with a terminal arm that passes through the point (-2,5).  
(b) Determine the related acute angle  $\beta$   
(c) Determine the principal angle  $\theta$
5. (a) Determine the exact primary trig ratios for an angle in standard position with a terminal arm that passes through the point (0,-5).  
(b) Determine the related acute angle  $\beta$   
(c) Determine the principal angle  $\theta$