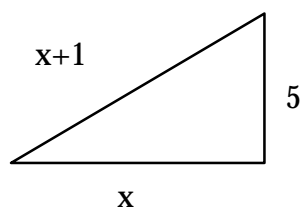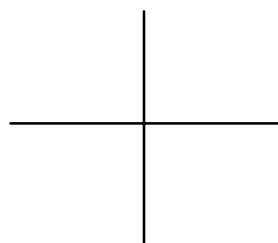TRIGONOMETRY   Chapter 1 Review Problems

1.   Solve for x in the triangle below.   2.   Graph the line 3y - 2x = 6

3.   Find the distance between the   4.   Find y so that the distance
      between points (-3,2) and (-9,10).   (-1, y) and (0, -3) equals 5.

5.   Find sine, cosine and tangent of -180°   6.   In which quadrant will θ lie
                                                      if $\sin \theta < 0$ and $\tan \theta > 0$?

7. θ makes a standard angle w/ terminal   8.   If $\sin \theta = 2/3$ and θ terminates in
      side through (-4,-3). Find all trig. func.   QII, find $\cos \theta$, $\tan \theta$, $\csc \theta$.

9.   If $\sec \theta = 2$ and $\tan \theta < 0$,   10.   If $\sin \theta = 1/5$, find $\sin^3 \theta$.
      find $\sin \theta$ and $\cot \theta$.

11.   Subtract and simplify: 12.   Multiply: $(\sin \theta - 1)(2\sin \theta - 1)$

$$\frac{1}{\sin^2 \theta} - 1$$

13.   Write $\tan \theta + \sin \theta$ as a fraction in   14.   Use the identities to show that
      terms of $\sin \theta$ and $\cos \theta$. $(\sin \theta)(\cot \theta) = \cos \theta$

15.   Use the identities to show that $\cos \theta(\sec \theta - \tan \theta) = 1 - \sin \theta$.

1. x=12   2. graph   3. 10   4. $-3\pm2\sqrt{6}$ 5. sin(-180°)=0, cos(-180°)=-1, tan(-180°)=0   6. QIII

7. $\sin \theta$=-3/5, $\cos \theta$= -4/5, $\tan \theta$=3/4, $\cot \theta$=4/3, $\sec \theta$=-5/4, $\csc \theta$=-5/3   8. $\cos \theta$=-√5/3, $\tan \theta$=-2/√5, $\csc \theta$=3/2

 9. $\sin \theta$=-√3/2, $\cot \theta$=-√3/3   10. 1/125   11. $\cot^2 \theta$ 12. $2\sin^2 \theta$-3$\sin \theta$ + 1   13. [$\sin \theta$(1 + cos θ)]/cos θ
14 & 15.   proofs