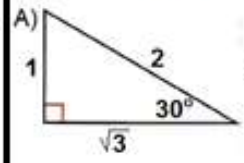
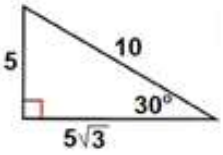
FRIDAY February 14, 2014 Class & Homework

1. For each triangle, complete the 3 trig ratios. Simplify all fractions and square roots.

A)



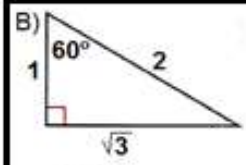
sin(30)=
cos(30)=
tan(30)=



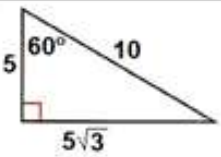
sin(30)=
cos(30)=
tan(30)=

What do you notice about the ratios for each triangle?

B)



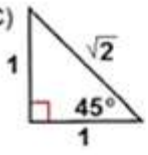
sin(60)=
cos(60)=
tan(60)=



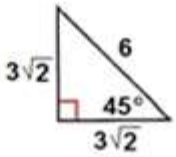
sin(60)=
cos(60)=
tan(60)=

What do you notice about the ratios for each triangle?

C)



sin(45)=
cos(45)=
tan(45)=



sin(45)=
cos(45)=
tan(45)=

What do you notice about the ratios for each triangle?

2. Solve each proportion for the variable X.

a) $\frac{\star}{\square} = \frac{X}{\triangle}$

b) $\frac{\square}{X} = \frac{\triangle}{\star}$

c) * $\frac{\square + X}{\star - X} = \frac{\star}{\square}$

d) * $\frac{\square - X}{\star} = \frac{\triangle + X}{\triangle}$

e) $\frac{7}{6} = \frac{X}{9}$

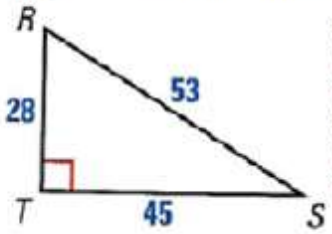
f) $\frac{3}{X} = \frac{5}{11}$

g) $\frac{4 + X}{3 - X} = \frac{12}{5}$

h) $\frac{7 - X}{5} = \frac{9 + X}{8}$

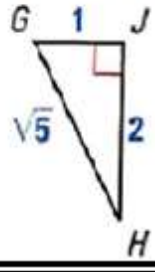
3) Find the sine, cosine and tangent ratio for each acute angle of the triangle. Each answer should be expressed as a reduced fraction.

a)



sin R =
cos R =
tan R =
sin S =
cos S=
tan S =

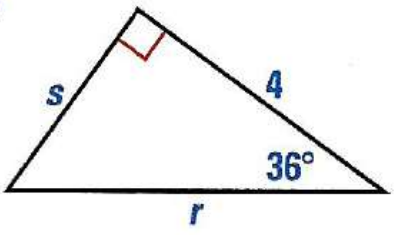
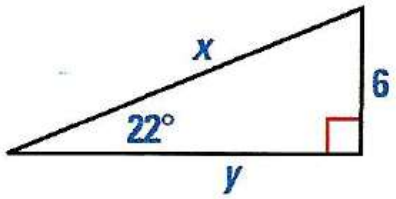
b)



sin H =
cos H =
tan H =
sin G =
cos G =
tan G =

4) Write a trig ratio in terms of one of the missing sides. Use the trig ratio to solve for the value of the missing side.

a)



b)