1) Solve the following equations:
a) $\left|\frac{7}{4} x+\frac{3}{2}\right|=\frac{2}{3}$
b) $x^{2}+8 \mathrm{x}+15=0$
c) $\sqrt{.22 x}=1.1$
2) Match the function with the correct graph (by labeling the pictures on the next page)
a. $x+5$
b. $(x+3)^{2}$
c. $|2 x|$
d. $2 x^{2}+1$
e. $-x$
f. $|x-3|+1$






3) Use the Pythagorean Theorum to find the missing value of the following triangles. (keep your answer in square-root form)
1. 


2.
3.

4.

4)
a) How many two-digit numbers can be composed from digits 1, 2, 3 without repetition of digits?
b) How many two-digit numbers can be composed from digits $1,2,3$, if repetition is allowed?
c) Using the previous two questions, can you find how many two-digit numbers composed from digits 1,2 , and 3 have repeating digits?
d) How many three-digit numbers can be made (with any digits) without repetition?
e) How many three-digit numbers can be made (with any digits), if repetition is allowed?
f) Using the previous two questions, how many three-digit numbers have repeating digits?

