$\qquad$
$\qquad$ Date $\qquad$

This is a weekly homework quiz that will be given every week and is due back the following Tuesday. This quiz is due back: March $27^{\text {th }}, 2018$

To receive full credit, all work must be shown. Any correct answer without work shown will receive only 1 point.

1) Given the function $f(x)=2 x^{2}-3 x+4$, evaluate $\frac{f(x+h)-f(x)}{h}$.
2) State the possible rations zeros for each function. Then find all zeros.

$$
f(x)=x^{3}+12 x^{2}+17 x-6
$$

3) Solve for a .

$$
3.4 e^{2-2 n}-9=-4
$$

4) Two forces of 25 and 15 pounds act on a body so that the angle between them measures 78 . Find the magnitude of the resultant force to the nearest pound.
5) Verify the trig identity:

$$
\frac{\cos x}{1-\sin x}-\tan x=\sec x
$$

