Diagnostic Quiz Name:_____

Color Code: _____

TRUE or FALSE: Let a, b, c be positive real numbers, and let x be any real number. Indicate whether each of the following is true (T) or false (F). If you have no idea, be honest and indicate (*).

T	F	*	$\frac{1}{3}+\frac{4}{3}=\frac{5}{6}$
T	F	*	$\frac{\left(\frac{2}{3}\right)}{5}=\frac{2}{15}$
T	F	*	$\frac{\left(\frac{2}{5}\right)}{\left(\frac{1}{2}\right)}=\frac{4}{5}$
T	F	*	$8-(-2)=8+2$
T	F	*	$-8+4=-4+8$
T	F	*	$3+2\times 4=20$
T	F	*	$\frac{24}{15}=\frac{8}{5}$
T	F	*	$(a+b)^2=a^2+b^2$
T	F	*	$(a-b)^2=a^2-b^2$
T	F	*	$\sqrt{a^2+b^2}=a+b$
T	F	*	$\frac{a+b}{c}=\frac{a}{c}+\frac{b}{c}$
T	F	*	$\frac{ab}{bc}=\frac{a}{c}$
T	F	*	$\frac{a+b}{b+c}=\frac{a}{b}+\frac{b}{c}$
T	F	*	$\frac{c}{a+b}=\frac{c}{a}+\frac{c}{b}$
T	F	*	$\left(a^2\right)^3=a^5$
T	F	*	$\left(\frac{a+b}{a-b}\right)^2=\frac{(a+b)^2}{(a-b)^2}$
T	F	*	If $3x+2=4$ then $x=2$.