|  |  |
| --- | --- |
| Propertiesby Sharrerp1/1Identity– who you areInvert – invert(to turn upside down)Commute – moveAssociate – group togetherReflect – reflection of oneselfSymmetric – exact same if foldedTrans – acrossSub – replaceJackson5 Properties songR 1S 2T 3equal signs | Additive Identity Property |
| Multiplication Identity Property |
| Multiplication Property of Zero |
| Multiplication Inverse Property |
| Additive Inverse Property |
| Communicative Property of Addition |
| Communicative Property of Multiplication |
| AssociativeProperty of Addition |
| AssociativeProperty of Multiplication |
| DistributiveProperty |
| ReflexiveProperty of Equality |
| Symmetric Property of Equality |
| Transitive Property of Equality |
| Substitution Property of Equality |
| $$2+0=2$$ | $a+0=a$  |
| $$3∙1=3$$ | $a∙1=a $  |
| $$10∙0=0$$ | $a∙0=0$  |
| $$6∙\frac{1}{6}=1$$ | $a∙\frac{1}{a}=1$  |
| $$-47+ 47=0$$ | $a+ -a=0$  |
| $$50+15=15+50$$ | $$a+b=b+a$$ |
| $$25∙2=2∙25$$ | $a∙b=b∙a$  |
| $\left(2+3\right)+6=2+(3+6)$  | $\left(a+b\right)+c=a+(b+c)$  |
| $$\left(5∙t\right)2=5(t∙2)$$ | $\left(ab\right)c=a(bc)$  |
| $$4\left(x-3\right)=4x-4∙3$$ | $$a\left(b+c\right)=ab+ac$$ |
| $$7=7$$ | $$a=a$$ |
| $$If 2+x=5$$$$then 5=2+x$$ | $$If a=b$$$then b=a$  |
| $$If 2+3=5$$$$and 5=7-2$$$$then 2+3=7-2$$ | $$If a=b$$$$and b=c$$$$then a=c$$ |
| $$x+\left(2+6\right)= x+8$$ | If $a=b$, then$ a$ can replace $b$ in any equation |