

Multiplication and division symbols: Is it a fact?

I will have two spare cubes if I put 32 cubes into rows of four.	
These facts are all part of one 'family' $12 \times 3 = 36$, $3 \times 12 = 36$, $36 \div 3 = 12$ $36 \div 12 = 3$	
$3 \times 3 > 2 \times 4$	
$18 \div 3 = 6$ and $6 \div 3 = 2$	
I know that $8 \times 2 = 2 \times 8$ because this shows an inverse relationship.	
$25 \div 1 = 1$	
$5 \times 4 = 10 \times 2 = 20 \times 1$	
$2 \times 4 = 8 \times 3 = 24$	
I will have no cubes left over if put 25 into six equal groups.	
I know that there are 13 single ones in 13, so $13 \div 1 = 13$	
$25 \times 4 = 4 \times 25$	
Six and four are both factors of thirty.	

These facts are all part of one 'family' $11 \times 3 = 33$, $3 \times 11 = 33$, $11 \div 3 = 3.6$ $3 \div 11 = 0.27$	
I know that $4 \times 3 = 3 \times 4$ because multiplication is commutative.	
$18 \div 3 = 6 \div 3 = 2$	
$1 \times 12 = 2 \times 6 = 3 \times 4$	
7 and 4 are both factors of 28	
I have more patches on my quilt than my friend. I have five rows of seven and he has eight rows of four.	
$30 \div 6 = 6 \div 30$	
$48 \times 1 = 48$ and $48 \div 1 = 48$	
When I place five tiles the same size in four rows I will use up all of my twenty tiles.	

Copy equations and expressions onto cardboard and cut into separate cards. Students take turns to take a card and explain to others in the group, **if and why** the statement is a fact, or **if and why** it is incorrect. (True or false)

Spare (blank cards) can be used for students to create more *Is it a fact?* Cards to add for others to use.

Or

Print onto sheets for individual students. Have them decide *Yes or No* (true or false) and *write about* or *draw* a diagram in the blank adjacent space, to justify their decision.