a) Rick, Selma and Tony are playing a game with counters.
Rick has some counters.
Selma has twice as many counters as Rick.
Tony has 6 counters less than Selma.
In total they have 54 counters.

number of counters Rick has : number of counters Tony has $= 1 : p$

Work out the value of p.

How many counters has Selma?	Let Rick have x counters. Selma has twice as many counters as Rick. $2 \times x = 2x$
How many counters has Tony?	Tony has 6 counters less than Selma $2x - 6$
How many counters have they in total?	$(x) + (2x) + (2x - 6) = 5x - 6$ $5x - 6 = 54$
How many counters has Rick?	$5x - 6 = 54$ $+6 \quad +6$ $5x = 60$ $\div 5 \quad \div 5$ $x = 12$
How many counters has Tony?	$2x - 6 = 2(12) - 6 = 18$
What is the value of p?	$12 : 18 = 1 : 1.5 \qquad p = 1.5$

b) Rick, Selma and Tony are playing a game with counters.
Rick has some counters.
Selma has three times as many counters as Rick.
Tony has 5 counters less than Selma.
In total they have 65 counters.

number of counters Rick has : number of counters Tony has $= 1 : p$

Work out the value of p.

How many counters has Selma?	Let Rick have x counters. Selma has three times as many counters as Rick. $3 \times x = 3x$
How many counters has Tony?	Tony has 5 counters less than Selma $3x - 5$
How many counters have they in total?	$(x) + (3x) + (3x - 5) = 7x - 5$ $7x - 5 = 65$
How many counters has Rick?	
How many counters has Tony?	
What is the value of p?	

BACKWARD FADED MATHS

c) Rick, Selma and Tony are playing a game with counters.
Rick has some counters.
Selma has twice as many counters as Rick.
Tony has 6 counters more than Selma.
In total they have 31 counters.

number of counters Rick has : number of counters Tony has $= 1 : p$

Work out the value of p.

How many counters has Selma?	Let Rick have x counters. Selma has twice as many counters as Rick. $2 \times x = 2x$
How many counters has Tony?	Tony has 6 counters more than Selma $2x + 6$
How many counters have they in total?	
How many counters has Rick?	
How many counters has Tony?	
What is the value of p?	

d) Rick, Selma and Tony are playing a game with counters.
Rick has some counters.
Selma has four times as many counters as Rick.
Tony has 16 counters less than Selma.
In total they have 56 counters.

number of counters Rick has : number of counters Tony has $= 1 : p$

Work out the value of p.

BACKWARD FADED MATHS