

⑤  $3x - y = 3$   
 $\Rightarrow y = 3x - 3$

x	0	1	2
y	-3	0	3

$2x - 3y = 2$   
 $\Rightarrow 2x = 2 + 3y$   
 $\Rightarrow x = \frac{2 + 3y}{2}$

x	1	4	-2
y	0	2	-2

$x + 2y = 8$   
 $\Rightarrow x = 8 - 2y$

x	8	0	2	4
y	0	4	3	2

⑥ let speed of rick. =  $x$  km/h  
 let speed of bus =  $y$  km/h

con. I

rickshaw		Bus
$d = 2$ km		$d = 14 - 2 = 12$ km
$t = \frac{d}{s} = \frac{2}{x}$ h		$t = \frac{d}{s} = \frac{12}{y}$ h

$\frac{2}{x} + \frac{12}{y} = \frac{30}{60}$

$(\div 2) \frac{1}{x} + \frac{6}{y} = \frac{15}{60} \dots \textcircled{i}$

con II

rickshaw		Bus
$d = 4$ km		$d = 14 - 4 = 10$ km
$t = \frac{d}{s} = \frac{4}{x}$ h		$t = \frac{d}{s} = \frac{10}{y}$ h

$\frac{4}{x} + \frac{10}{y} = \frac{39}{60} \dots \textcircled{ii}$

$\textcircled{i} \times 4 - \textcircled{ii} \times 1$

~~$\frac{4}{x} + \frac{24}{y} = 1$~~

~~$\frac{4}{x} + \frac{10}{y} = \frac{39}{60}$~~

$\frac{14}{y} = 1 - \frac{39}{60}$

$\Rightarrow \frac{2 \cdot 14}{y} = \frac{21}{60}$

$\Rightarrow y = \frac{2 \times 60 \cdot 20}{3}$

Solve  $\textcircled{ii}$   
 $y = 40$

$\frac{4}{x} + \frac{10}{40} = \frac{39}{60}$

$\frac{4}{x} = \frac{39}{60} - \frac{1}{4}$

$\Rightarrow \frac{4}{x} = \frac{39 - 15}{60}$

$\Rightarrow \frac{4}{x} = \frac{24}{60}$

$\Rightarrow x = \frac{4 \times 60}{24}$

$\Rightarrow x = 10$   
 Speed rick. = 10 km/h  
 Speed bus = 40 km/h