

1. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 3$ ,  $R_B = 4$ ,  $T_B = 7 - T_A$   
Find  $T_A$  and  $T_B$ .
2. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 3$ ,  $R_B = 5$ ,  $T_B = 8 - T_A$   
Find  $T_A$  and  $T_B$ .
3. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 4$ ,  $R_B = 2$ ,  $T_B = 3 - T_A$   
Find  $T_A$  and  $T_B$ .
4. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 5$ ,  $R_B = 3$ ,  $T_B = 8 - T_A$   
Find  $T_A$  and  $T_B$ .
5. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 8$ ,  $R_B = 2$ ,  $T_B = 5 - T_A$   
Find  $T_A$  and  $T_B$ .
6. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 5$ ,  $R_B = 2$ ,  $T_B = 7 - T_A$   
Find  $T_A$  and  $T_B$ .
7. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 6$ ,  $R_B = 8$ ,  $T_B = 7 - T_A$   
Find  $T_A$  and  $T_B$ .
8. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 2$ ,  $R_B = 4$ ,  $T_B = 6 - T_A$   
Find  $T_A$  and  $T_B$ .
9. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 2$ ,  $R_B = 6$ ,  $T_B = 8 - T_A$   
Find  $T_A$  and  $T_B$ .
10. Given:  $R_A T_A = R_B T_B$ ,  $R_A = 4$ ,  $R_B = 3$ ,  $T_B = 7 - T_A$   
Find  $T_A$  and  $T_B$ .

Solve:

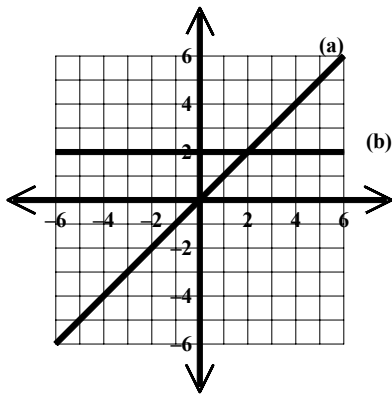
11. 
$$\frac{x}{4} - \frac{2+x}{2} = 2$$

12. 
$$\frac{x+1}{2} - \frac{x-1}{6} = 2$$

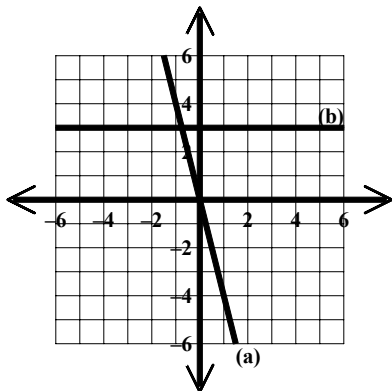
13. 
$$\frac{a+2}{3} - \frac{1}{2} = \frac{4a-5}{4}$$

14. The sum of three consecutive integers is
- $-132$
- . What are the integers?

15. The sum of three consecutive integers is  $-144$ . What are the integers?
16. Find three consecutive odd integers such that the sum of the first and third equals the sum of the second and  $43$ .
17. Find four consecutive even integers such that  $6$  times the sum of the first and second is  $16$  less than  $11$  times the fourth.
18. If  $\frac{1}{3}$  of the books had been sold and there were  $116$  books left, how many books were printed?
19. Only  $\frac{1}{6}$  of the university students participated in theater. If  $3550$  did not participate in theater, how many university students were there?
20. Find the equations of lines (a) and (b).



21. Find the equations of lines (a) and (b).



22. Use the slope-intercept method to graph the following equation:  $y = \frac{1}{3}x - 2$

23. Graph the following equation on a rectangular coordinate system:  $-x + y - 3 = 0$

Factor.

24.  $x^2 + x - 42$

25.  $x^2 - 11x + 18$

26.  $-6u + u^2 + 8$

27.  $x^2 - 2x - 3$