

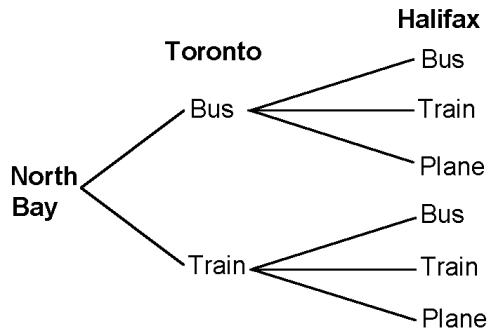
Review 3 Answer Section

MULTIPLE CHOICE

- | | | | |
|-----------|------------|------------|-----------|
| 1. ANS: C | 2. ANS: D | 3. ANS: C | 4. ANS: C |
| 5. ANS: A | 6. ANS: C | 7. ANS: B | 8. ANS: A |
| 9. ANS: C | 10. ANS: D | 11. ANS: B | |

SHORT ANSWER

- | | | | |
|----------------------|-----------------------|---------------|------------------------------|
| 12. ANS: $t_{39,11}$ | 13.a) 8! b) 11! c) 7! | 14. 8 ways. | 15. ANS: 80 ways |
| 16. 3360 | 17. 8! | 18. 8 ways | 19. ANS: 24 |
| 20. $t_{7,3}$ | 21. 144 | 22. 6 760 000 | 23. ANS: 3 175 524 |
| 24. 4 100 625 | 25. 15 | 26. 10 080 | 27. $\frac{33!}{7!5!6!9!6!}$ |
| 28. ANS: | | | |



There are six possible itineraries for Daima and her family.

- | | | |
|---------------|---------|-------------------|
| 29. 3 603 600 | 30. 256 | 31. 7 200 000 000 |
|---------------|---------|-------------------|

PROBLEM

- | | | | |
|--|---|---------------------------------------|---------------------------|
| 32. $\frac{9!}{3!3!3!}$ | 33. $\frac{12!}{2!9!} + \frac{12!}{3!8!}$ | 34. $\frac{6!}{4!2!}$ | 35. $\frac{20!}{10!4!6!}$ |
| 36. $\frac{15!}{10!5!} + \frac{15!}{9!6!}$ | 37. 30240 | 38. 6 | 39. 12 |
| 40. 4 | 41. a) ${}_9P_3$ b) ${}_8P_2 = 56$ | 42. a) ${}_7P_7$ b) ${}_6P_6$ c) 1440 | d) 1200 |