
**First Name:** _____ **Last Name:** _____ **Grade:** _____

**Teacher:** _____ **Parent's email:** _____

# Trips and Vacations

**Kinder & First Grade: solve <u>at least</u> 3 problems.**
**Second & Third Grade: solve <u>at least</u> 7 problems.**
**Fourth Grade and above: solve <u>at least</u> 12 problems.**

| | | *Answer* |
|---|---|---|
| 1. | Liam is going on a plane ride from Seattle to Tokyo, and the flight takes 11 hours. If he has been on the plane for 3 hours already, how many more hours does he need to be on the plane before reaching his destination?<br>11 hours – 3 hours = 8 hours | *8 [hours]* |
| 2. | Sarah is packing for a camping trip, and she wants to bring 8 granola bars. She has already packed 2 almond granola bars and 3 peanut butter granola bars into her backpack. How many additional granola bars must she include in her packing?<br>She packed: 2 + 3 = 5 granola bars.<br>Since she wants to bring 8 granola bars, she needs to pack 8 – 5 or 3 more ganola bars. | *3 [granola bars]* |
| 3. | $6 + $6 + $6 = $18 | *[$]18 or 18 dollars* |
| 4. | 30 – 7 + 1 = 24 | *24 [passengers]* |
| 5. | Half of 24 is 12. So, they need to travel 12 more miles. | *12 [miles]* |
| 6. | Six hours after 8:45 a.m. is 2:45 p.m. 45 minutes later would be 3:30 p.m. | *3:30 PM or 3:30 p.m.* |
| 7. | The first train was on 15 minutes earlier than 8:25 a.m. or 8:10 a.m.<br>Make the list: 8:10 a.m., 8:25 a.m., 8:40 a.m., 8:55 a.m.<br>9:10 a.m., 9:25 a.m., 9:40 a.m., 9:55 a.m.<br>10:10 a.m., 10:25 a.m., 10:40 a.m., 10:55 a.m.<br>There were **12 trains** between 8 a.m. and 11 a.m.<br>Another way:<br>Between 11 a.m. and 8 a.m. there are 3 hours. Trains go every 15 minutes. Thus, there are 4 trains in 1 hour, and 12 trains in 3 hours.<br>  | *12 [trains]* |
| 8. | Total number of people travelling: 167 + 7 + 18 = 192.<br>We can make a table.<br>The table shows that three buses will not be enough. Therefore, the fewest number of buses needed is 4. | *4 [buses]* |

| Number of Bus | Number of People |
|---|---|
| 1 | 48 |
| 2 | 96 |
| 3 | 144 |
| 4 | 192 |

**Use this information to solve the following three problems. The clocks show the times in three cities at the same time.**

Sydney
Sun, 4:30 p.m.

Singapore
Sun, 1:30 p.m.

Tokyo
Sun, 2:30 p.m.

| | | |
|---|---|---|
| 9. | Since Singapore is 3 hours behind Sydney, Tommy gets the call at 8 – 3 = 5 p.m. | *5:00 p.m.*<br>*Or 5 PM* |
| 10. | Tokyo is 1 hour ahead Singapore. The 7 hours flight arrived at 6 a.m. Singapore time, which is 7:00 a.m. in Tokyo. | *7:00 a.m. or 7 AM* |
| 11. | 9 hours and 50 minutes after 10 p.m. is 7:50 a.m. (Tokyo time), which is 9:50 a.m. (Sydney time). Their flight arrives 9:50 a.m. the next day (Dec 17). | *December 17 at 9:50 a.m.* |
| 12. | 20 liters of gas filled the tank from 1/10 of its capacity to ½ = 5/10. So, 20 liters correspond to 4/10 of the tank. 1/10 of the full tank is 20/4 = 5 liters of gas; full tank: 5×10 = 50 liters. | *50 [liters]* |
| 13. | There are 29 rows in total (1 has 4 seats; 28 has 6 seats each): 28×6 + 1×4 = 172 seats.<br>One-fourth of the seats are empty: ¼ of 172 = 43 seats | *43 [seats]* |
| 14. | One way: make and organized table:<br>The two trains will pass each other after the train leaving Kitchener is 40 km away from the Kitchener station. Since the train is going 60 km/hour or 1 km/min, then the trains begin to pass each other at 40 min after noon or 12:40 pm.<br><br>Another way:<br>Every hour two trains cover 60 + 90 = 150 km.<br>100÷150 = 2/3 hours. If we convert 2/3 hours to minutes, it will be = 2/3×60 = 40 minutes.<br>Noon plus 40 minutes make 12:40 p.m. | *12:40 p.m.* |

| Time (in min after noon) | Distance travelled by the train leaving Kitchener | Distance travelled by the train leaving London | Total distance travelled by both trains | Distance left between the trains |
|---|---|---|---|---|
| 10 | 10 | 15 | 25 | 100-25 = 75 |
| 20 | 20 | 30 | 50 | 100-50 = 50 |
| 30 | 30 | 45 | 75 | 100-75 = 25 |
| 40 | 40 | 60 | **100** | **100-100 = 0** |
| 50 | 50 | 75 | 125 | |
| 60 | 60 | 90 | 150 | |

| | | |
|---|---|---|
| 15. | Total distance = 2800 miles<br>Cost of gas: (Total Distance/Miles per Gallon) × price per gallon = 2800/25 × $4.55 = $509.60 | *[$]509.60* |
| 16. | For the first 2.5 hours: 2.5×55 = 137.5 miles<br>For the next 1.5 hours: 1.5×45 = 67.5 miles<br>137.5 miles + 67.5 miles = 205 miles | *205 [miles]* |
| 17. | a. How much will they spend on flights in USD? $760 × 5 = $3800<br>b. How many Euros will they receive for their U.S. dollars if they exchange $2,000? $2000 × 0.94 EUR = 1880 EUR | *a. [$]3800*<br>*b. 1880 [Euros]* |
| 18. | Total distance for roundtrip: 343×2 = 686 miles. The amount of gas needed for the trip: 686 ÷ 28 = 24.5 gallons. The total cost for the gas: 24.5 gallons × $4.90 = $120.05 | *[$]120.05* |