

Classwork 27.

1. A bus carrying 4th-grade students started its journey to a field trip from Stony Brook at 9 am, moving at a speed of 54 km/h. After $2\frac{1}{3}$ hours, Robert's father realized that Robert had forgotten his sleeping bag, so he jumped into his car and started going after the bus at a speed $1\frac{4}{9}$ times higher than the speed of the bus. When will he catch the bus?
2. Two skiers are at a distance of 6 km from each other. They began to move simultaneously and met in 15 minutes. The next day, they began their journey from the same place in the same direction, and after 50 minutes one was 5 km behind the other. What is the speed of each skiers?
3. Parliament elections were held on Fruit Island. Everyone who voted for the Mandarin party love tangerines. Of those who voted for other parties, 90% do not like tangerines. How many percent of the votes got the Mandarin party, if it is known that exactly 46% of the inhabitants love tangerines.
4. Jofn, Rob, and Mike were picking mushrooms. John collected 20% more mushrooms than Rob, but 20% less than Mike. By what percentage did Mike collect more mushrooms than Rob?
5. Evaluate:



$$\frac{\left(3^{-1} - \sqrt{1\frac{7}{9}}\right)^{-2}}{\frac{37}{300} : 0.0925} + 12.5 \cdot 0.64;$$

6. Represent as a power if possible:
 - a. $-y^3 \cdot (-y)^5$;
 - b. $b^6 \cdot (-b)^{10}$;
 - c. $(a-b)^3 \cdot (b-a)^2$;
 - d. $(x-2y)^4 \cdot (y-2x)^5$
- 7.