

Name _____

Estimating to Solve Problems

Estimate the answer for each problem. **Show work** for each question.

1. Estimate the difference by first rounding to the nearest thousand: $17,892 - 11,941$
2. Estimate the product by first rounding to the nearest ten: 431×73
3. Estimate the sum by first rounding to the nearest hundred: $572 + 914$
4. Estimate the quotient by first rounding to the nearest ten: $363 \div 38$
5. A class of 22 students is taking a field trip to a museum. For students, admission is \$5.25 and the planetarium show is \$4.70. Estimate the total cost of admission and planetarium show for the class.
6. If a shark lost 21 teeth every week for a year, about how many teeth would the shark lose?

7. Gabe bought 6 shirts for \$24.99 each and 4 pairs of shorts for \$34.97 each. Estimate the total cost of the shirts and shorts.

8. In 2018, the population of Pennsylvania was about 12.81 million. The land area of Pennsylvania is 44,743 square miles. About how many people were there per square mile?

9. James is planning a road trip. His car gets an average of 22 miles per gallon. If gasoline costs an average of \$2.93 per gallon, and James has \$177 to spend on gas, about how many miles could he travel?

10. All students from 6 classrooms were grouped into 3 teams for a school field day. There were 24, 21, 27, 19, 13, and 15 students in the classrooms. Estimate the number of students on each team. Round your final answer to the nearest 10.

Estimating to Solve Problems Answers

Estimate the answer for each problem. **Show work** for each question.

1. Estimate the difference by first rounding to the nearest thousand: $17,892 - 11,941$

6,000

2. Estimate the product by first rounding to the nearest ten: 431×73

30,100

3. Estimate the sum by first rounding to the nearest hundred: $572 + 914$

1,500

4. Estimate the quotient by first rounding to the nearest ten: $363 \div 38$

9

5. A class of 22 students is taking a field trip to a museum. For students, admission is \$5.25 and the planetarium show is \$4.70. Estimate the total cost of admission and planetarium show for the class.

\$220

6. If a shark lost 21 teeth every week for a year, about how many teeth would the shark lose?

1,000 teeth

7. Gabe bought 6 shirts for \$24.99 each and 4 pairs of shorts for \$34.97 each. Estimate the total cost of the shirts and shorts.

\$290

8. In 2018, the population of Pennsylvania was about 12.81 million. The land area of Pennsylvania is 44,743 square miles. About how many people were there per square mile?

≈289 people per square mile

9. James is planning a road trip. His car gets an average of 22 miles per gallon. If gasoline costs an average of \$2.93 per gallon, and James has \$177 to spend on gas, about how many miles could he travel?

≈1,200 miles

10. All students from 6 classrooms were grouped into 3 teams for a school field day. There were 24, 21, 27, 19, 13, and 15 students in the classrooms. Estimate the number of students on each team. Round your final answer to the nearest 10.

≈40 students per team