Lesson 5.5T ~ Estimating Products and Quotients

Name_____ Period_____ Date_____

Estimate each product using compatible numbers.

1. For $\frac{1}{3} \times 16$

    a. Is 15 or 17 compatible with 3? _____

    b. Replace 16 with your answer in **part a**. $\frac{1}{3} \times$ ☐ = ☐

    c. Use the answer from **part b** as the answer to your estimate: $\frac{1}{3} \times 16 \approx$ ☐

2. $\frac{1}{4} \times 27 \approx$ ☐   **3.** $\frac{1}{3} \times 35 \approx$ ☐

4. Mike shot 21 baskets. He made about $\frac{3}{4}$ of his shots. About how many baskets did Mike make?

Estimate each product using compatible numbers.

5. For $1\frac{1}{3} \times 2\frac{7}{8}$:

    a. Round $1\frac{1}{3}$ to the nearest whole number: _____

    b. Round $2\frac{7}{8}$ to the nearest whole number: _____

    c. Multiply the answer from **part a** by the answer in **part b**. _____ × _____ = _____

    d. Use the answer from **part c** as the answer to your estimate: $1\frac{1}{3} \times 2\frac{7}{8} \approx$ ☐

Estimate each product using compatible numbers.

6. $2\frac{4}{5} \times 2\frac{3}{4} \approx$ ☐

7. $5\frac{5}{7} \times 2\frac{1}{5} \approx$ ☐

8. Roger needed $2\frac{1}{3}$ scoops of dirt to fill each container. He had $4\frac{6}{7}$ container to fill. Approximately how many more scoops of dirt will he need to fill these containers?

Estimate each quotient using compatible numbers.

9. For $14\frac{1}{2} \div 3\frac{1}{8}$:

    a. Round the smaller number ($3\frac{1}{8}$) to the nearest whole number: _____

    b. Choose a compatible number to replace $14\frac{1}{2}$. _____

    c. Rewrite and solve the expression using your compatible numbers.

        part b ÷ part a: _____ ÷ _____ = _____

    d. Use the answer from **part d** as your estimate for: $14\frac{1}{2} \div 3\frac{1}{8} \approx$ ☐

10. $33\frac{1}{8} \div 4\frac{1}{6} \approx$ ☐

11. $27\frac{1}{4} \div 7\frac{1}{8} \approx$ ☐

12. Sherri has $49\frac{1}{6}$ pages left in her book. She wants to finish it in about $4\frac{1}{4}$ days. Estimate how many pages Sherri should read each day in order to finish the book in time.