

Name: Key

Period: _____

Rational Round-up Mixed Review

1. About $\frac{1}{5}$ of the world's population lives in China and $\frac{1}{6}$ of the world's population lives in India. What fraction of the world's population lives in other countries?

$$1 - \left(\frac{1}{5} + \frac{1}{6}\right) =$$

$$1 - \frac{11}{30} = \boxed{\frac{19}{30} \text{ live in other countries}}$$

$$\begin{array}{r} \frac{1}{5} \quad \frac{6}{30} \\ + \frac{1}{6} \quad \frac{5}{30} \\ \hline \frac{11}{30} \end{array}$$

$$\begin{array}{r} \cancel{1} \frac{30}{30} \\ - \frac{11}{30} \\ \hline \frac{19}{30} \end{array}$$

2. The lap length of Watkins Glen auto racing track is 2.45 miles. The lap length of Bristol is 0.5 of a mile. How many times longer is a lap at Watkins Glen than at Bristol?

$$2.45 \div 0.5 =$$

$$\boxed{4.9 \text{ times longer}}$$

$$\begin{array}{r} 4.9 \\ 0.5 \overline{) 2.45} \\ \underline{-20} \\ 45 \\ \underline{-45} \\ 0 \end{array}$$

3. A recipe calls for $2\frac{1}{4}$ cups of flour. How much flour would you need to make $\frac{1}{3}$ of the recipe?

$$2\frac{1}{4} \times \frac{1}{3} =$$

$$\frac{93}{4} \times \frac{1}{3} = \boxed{\frac{31}{4} \text{ cup of flour}}$$

4. From the START, you move 10 spaces forward around the game board. On the next turn, you move 4 spaces backward. How far from START are you now?

$$10 + -4 = \boxed{6 \text{ spaces from start}}$$

5. Shawna wants to store CD's on a shelf that is $16\frac{2}{3}$ inches wide. If each CD is $\frac{1}{3}$ of an inch wide, how many CD's can be stored on the shelf?

$$16\frac{2}{3} \div \frac{1}{3} =$$

$$\frac{50}{3} \times \frac{3}{1} = \boxed{50 \text{ CD's fit}}$$

6. Mr. Frederick bought five ceiling fans to install in his home. What is the cost of each fan if the total was \$608.55?

$$608.55 \div 5 =$$

$$\boxed{\$121.71/\text{fan}}$$

$$\begin{array}{r} 121.71 \\ 5 \overline{) 608.55} \\ \underline{-5} \\ 10 \\ \underline{-10} \\ 8 \\ \underline{-5} \\ 35 \end{array}$$

7. A hiker averages 6.375 km per hour. If he hikes for 5.3 hours, how many kilometers did he hike?

$$6.375 \times 5.3 =$$

$$\boxed{33.7875 \text{ km}}$$

$$\begin{array}{r} 6.375 \\ \times 5.3 \\ \hline 19125 \\ 31875 \\ \hline 33.7875 \end{array}$$

8. If you have \$216 and you spend \$12 each day, how long would it be until you had no money left?

$$216 \div 12 =$$

$$\boxed{18 \text{ days}}$$

$$\begin{array}{r} 18 \\ 12 \overline{) 216} \\ \underline{-12} \\ 96 \\ \underline{-96} \\ 0 \end{array}$$

9. David mowed 0.3 of the yard while his brother mowed 0.25 of it. What fraction of the yard still needs to be mowed?

$$\frac{3}{10} + \frac{1}{4} =$$

$$\frac{6}{20} + \frac{5}{20} = \frac{11}{20}$$

$$1 - \frac{11}{20} = \frac{9}{20} \text{ still to mow.}$$

10. Mrs. Lau rolls out 2.75 feet of dough to make noodles. If the noodles are 0.375 of an inch wide, how many noodles will she make?

$$\begin{array}{r} 2.75 \\ \times 12 \\ \hline 550 \\ 275 \\ \hline 33.00 \end{array}$$

$$2.75 \text{ feet} \times 12 = 33 \text{ inches}$$

$$33 \div 0.375 =$$

$$33 \div \frac{3}{8} =$$

$$33 \times \frac{8}{3} = 88$$

$$\boxed{88 \text{ noodles}}$$

11. A farmer has 6.5 acres of land for growing crops. If she plants corn on $\frac{3}{5}$ of the land, how many acres of corn will she have?

$$\frac{3}{5} \times 6\frac{1}{2} =$$

$$\frac{3}{5} \times \frac{13}{2} = \frac{39}{10} = \boxed{39/10 \text{ acres of corn}}$$

12. During an six hour period, the temperature dropped 18 degrees F. Find the average hourly change in temperature.

$$-18 \div 6 = -3^\circ \quad \boxed{\text{drop of } 3^\circ \text{ per hour}}$$

13. The ceiling in a storage unit is $5\frac{5}{8}$ m high. How many boxes can be stacked in a single stack of each

box is $\frac{3}{4}$ m tall?

$$5\frac{5}{8} \div \frac{3}{4} =$$

$$\frac{45}{8} \times \frac{4}{3} = \frac{15}{2} = 7\frac{1}{2}$$

$$\boxed{7 \text{ boxes}}$$