

Problem Solving Practice

1. There are 181 school days in the school year. If we have 16 math topics to get through this year, at most, how many days can we spend on each topic?

$$\begin{array}{r} 11 \\ 16 \overline{) 181} \\ \underline{-16} \\ 21 \\ \underline{-20} \\ 1 \end{array}$$

We can spend
11 days on each topic.

2. Julia commutes 18 miles to and from school every school day. About how many miles does Julia put on her car during the school year just commuting? The school year is about 30 weeks total.

$$20 \times 2 = 40/\text{day} \quad 40 \times 5 = 200/\text{wk}$$

$$200 \times 30 = 6,000$$

She commutes about
6,000 miles over the
school year.

3. Mrs. Meyer took her kids to Menchie's. Nathan's bowl weighed 11.25 oz. Gunnar's weighed 10.72 oz., Andrew's weighed 10.6 oz and Julia's weighed 9 oz. The cost per ounce for the frozen yogurt and toppings is \$0.49. How much did this trip to Menchie's cost Mrs. Meyer? Round the answer to the nearest hundredth.

$$\begin{array}{r} 11.25 \\ 10.72 \\ 10.60 \\ + 9.00 \\ \hline 41.5702 \end{array}$$

$$\begin{array}{r} 41.57 \\ \times .49 \\ \hline 137413 \\ 166280 \\ \hline \$20.3693 \end{array}$$

Mrs. Meyer spent \$20.37

4. The numbers below follow a pattern. Fill in the next two numbers.

0.008

0.08

0.8

8.

80800

Explain the relationship between the numbers and how you know what numbers will come next.

Each number in the pattern increases and is 10 times greater than the one before it.

5. Mrs. Meyer's kids have money they want her to deposit in the bank. Julia has \$547.55. Gunnar has \$189.15. Nathan has \$122.88 and Andrew has \$85.00. About how much will she be depositing?

$$550 + 200 + 120 + 100 = \$970$$

$$500 + 200 + 100 + 100 = \$900$$

6. What is the exact total Mrs. Meyer will be depositing?

$$\begin{array}{r} 547.55 \\ + 189.15 \\ \hline 736.70 \\ + 207.88 \\ \hline 944.58 \end{array}$$

She'll deposit \$944.58

7. The Meyer family traveled a total of 14,670.89 miles this year. The Qualters family traveled 9,789.56 miles. How many more miles did the Meyer family travel?

$$\begin{array}{r} 14,670.89 \\ - 9,789.56 \\ \hline 4,881.33 \end{array}$$

The Meyer family traveled 4,881.33 more miles than the Qualters family.

8. The Meyer boys are swimmers. She is in charge of collecting money to buy new towels for the Aurora Swim Team. The extra absorbent towels cost \$26.99 each. If there are 47 kids on the swim team, how much will she need to collect?

$$\begin{array}{r} 26.99 \\ \times 47 \\ \hline 18893 \\ + 107960 \\ \hline 1,268.53 \end{array}$$

She'll need to collect \$1,268.53

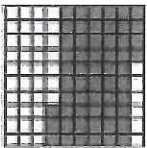
9. Julia commutes 18 miles to John Carroll. Gunnar's drive to school is .15 times this distance. How far is Gunnar's commute to the Aurora High School from home?

$$\begin{array}{r} 18 \\ \times .15 \\ \hline 90 \\ + 180 \\ \hline 2.70 \end{array}$$

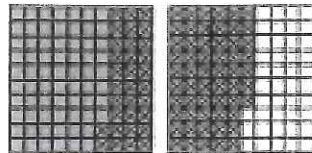
2.70

Gunnar drives 2.7 miles to school.

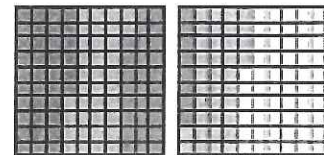
10. Write the equations for the models.



$$.37 + .57 = .94$$



$$1.57 - .89 = .68$$



$$.36 \times 4 = 1.44$$

11. Write the following number in word form, expanded form and exponent form.

8,209.049

Word form:

Eight thousand two hundred nine and forty-nine thousandths

Expanded form:

$$8000 + 200 + 9 + \frac{4}{100} + \frac{9}{1000}$$

Exponent form:

$$(8 \times 10^3) + (2 \times 10^2) + 9 + \frac{4}{100} + \frac{9}{1000}$$

12. Compare the following decimals by placing a greater than, less than or equal to sign.

$4.15 > 4.015$

$1.054 > 1.045$

$5.14 = 5.140$

$5.104 < 5.401$