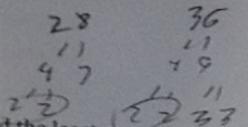


Name Kay

Chapter 1 Practice Test

1. Find the greatest common factor of 28 and 36 (2pts)



GCF: 4

12 · 7 =

2. Find the least common multiple of 12 and 28 (2pts)

12 = 12, 24, 36, 48, 60, 72, 84, 96, ...

28 = 28, 56, 84

LCM: 84

12 = 2 · 2 · 3  
28 = 2 · 2 · 7

LCM = 2 · 2 · 3 · 7

3. The table shows the animals at a petting zoo. (2pts each)

Animals at a Petting Zoo	
Chickens	3
Deer	5
Donkey	8
Goats	7

- a. What is the ratio of donkeys to deer?

$$\frac{8}{5} \quad 8 \text{ to } 5$$

- b. What is the ratio of chickens the total number of animals?

$$\frac{3}{3+5+8+7} = \frac{3}{23} \quad 3 \text{ to } 23$$

Students at the State Fair	
5th graders	8
6th graders	7
7th graders	9
8th graders	2

Brook Middle School at the state fair. (2pts each)

a. What is the ratio of fourth graders to the total number of students at the fair?

$$\frac{8}{8+7+9+2} = \frac{8}{26} = \frac{4}{13} \quad 4 \text{ to } 13$$

b. What is the ratio of eighth graders to the total number of students at the fair?

$$\frac{2}{26} = \frac{1}{13} \quad 1 \text{ to } 13$$

Write each rate as a unit rate (1pt each)

a. 428 kilometers in 6 hours

$$\frac{428}{6} = 71.33 \dots$$

$$\begin{array}{r} 71.33 \dots \\ 6 \overline{) 428.00} \\ \underline{42} \phantom{00} \\ 8 \phantom{00} \\ \underline{6} \phantom{00} \\ 20 \phantom{0} \\ \underline{18} \phantom{0} \\ 20 \end{array}$$

about 71 km per hour

b. \$150 for 10 books

$$\frac{150}{10} = \frac{15}{1}$$

books

15 dollars per book.

6. Ms. Sims traveled to 36 countries in 80 days. At this rate, how many countries would she travel to in 40 days? (2pts)

Countries	36	9	27
Days	80	20	60

$\rightarrow \div 4 \uparrow \times 3$

27 countries

7. Rida bought 4 tickets to a concert for \$28. At this rate, how much would 5 tickets cost? (2pts)

Number of Tickets	4	1	5
Money Spent (\$)	28	7	35

$\rightarrow \div 4 \times 5$

35 dollars

8. George reads 240 pages in 9 days. Which reading rate is equivalent to his reading rate. Explain the reason for your choice. (2pts)

~~A. 75 pages in 3 days~~

C. 105 pages in 5 days

B. 60 pages in 2 days

D. 80 pages in 3 day

$\frac{240}{9 \div 3} = \frac{80}{3}$



9. Bus A leaves a stop every 16 minutes. Bus B leaves the same stop every 18 minutes. If they both leave at 3:00 P.M., at what time will they next leave together? (2pts)

$$A - 16, 32, 48, 64, 80, 96, 112, 128, 144, 160,$$

$$B - 18, 36, 54, 72, 90, 108, 126, 144, 156$$

$$144 \text{ min.} = 2 \text{ hr } 24 \text{ min.}$$

$$\begin{array}{r} 16 \quad | \quad 18 \\ 11 \quad | \quad 11 \\ \hline 2 \cdot 2 \cdot 2 \cdot 2 \quad | \quad 3 \cdot 3 \cdot 2 \end{array}$$

$$3 + 2:24 = \underline{5:24 \text{ P.M.}}$$

$$\text{LCM: } 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 3$$

10. In a bowl of m&m's, the ratio of red to yellow m&m's is 5:2. If there are over 40 red m&m's, how many red and yellow m&m's can possibly be in the bowl. Explain your answer (3pts)

$$\begin{array}{r} \text{red} \rightarrow \frac{5}{2} = \frac{40}{16} \\ \text{yellow} \end{array}$$

$$40 + 16 = \underline{\underline{56}} \text{ red + yellow}$$