Name: Date:

WORKSHEET :

Word Problems
Fraction, Percent,
Integer

1. There are 1,950 students at Lincoln High School. Of these, 1/3 are seniors. How many students at Lincoln are not seniors?

A. 550 B. 1,300 C. 650 D. 1,350

2. A motorcycle purchase cost $2,500 and the buyer pays $800 for the downpayment. What fraction of the price still needs to be paid?

3. Saige has 5/8 as much money as Leon. Leon has one and one quarter as much money as Mary. Mary has $5,000. How much more money does Leon have than Saige?

4. Three partners, Dan, Dave, and Diane divide proceeds from $45,000 income. If Dan gets 2/5 of the income and Diane gets 1/3, then how much money does Dave receive?

5. Ivette ate 1/8 of the pie. Fernanda ate twice that amount. What is the ratio of the amount of pizza the two ate to the remaining?

A. 3:8 B. 3:5 C. 5:8 D. 5:3

6. Jeff works 5 days per week. On day 1, he completes 1/2 of his work. The next day he completes 1/4 of the remaining work. What fraction of the week's work remains?

7. Brent hit 5/6 as many golf balls as Juan. If Brent hit 35 golf balls, then how many did Juan hit?

8. 40% of the 7,920 visitors to the museum were children. If 25% of the children and 1/3 of the adults were repeat visitors, then what percentage of the visitors to the museum were first time visitors?

9. 80% of the children in a class have pets. 45% of them have cats and 40% of pet owners have dogs while the rest have birds. If 6 children in the class have birds then how many students are in the class?

10. Max wants to buy two video games at the same price, but he is short by 37.5% of the total. If Max buys 1 video game then he will have $35 left over. What is the price of a video game?

ANSWERS :

Word Problems
Fraction, Percent,
Integer

1. (D) 1 - 1/3 = 2/3 students are not seniors. 2/3 × 1,950 = 1,300 non-seniors.

2. $2,500 - $800 = $1,700 remaining to pay. Fraction = Remaining/Total = $1,700/$2,500 = 68/100 = 17/25

3. L = 1 1/4 M
S = 5/8 M
M = $5,000

L - S = (1 1/4 - 5/8) × $5,000 = (5/4 - 5/8) × 5,000 = (10/8 - 5/8) × 5,000 = (5/8) × 5,000 = 5 × 625 = $3,125

4. Dave receives (1 - 1/3 - 2/5) × $45,000 = (15/15 - 5/15 - 6/15) × $45,000 = (4/15) × $45,000 = 4 × $3,000 = $12,000.

5. (B) Twice 1/8 = 2 × 1/8 = 2/8. 1/8 + 2/8 = 3/8 of the pie eaten.The remaining amount is 1 - 3/8 = 5/8. The ration eaten to not eaten is 3/8 : 5/8 which is the same as 3:5.

6. Jeff starts with 1 full job and he completes 1/2 day 1 leaving 1 - 1/2 = 1/2 left at the start of day 2. If he completes 1/4 of the 1/2 left then Jeff is left with (1 - 1/4) × 1/2 = 3/8 of the job remaining after two days work.

7. Set up the proportion equation.
5/6 = 35/J
J = 6 × 35/5 = 6 ×7 = 42 golf balls

8. Repeat Visitors = Repeat Children + Repeat Adults
Repeat Visitors = Total Visitors [40% children × (100% - 25%) repeat + (100% - 40%) adults × (1 - 1/3) repeat] = 7,920[(4/10)(3/4) + (6/10)(2/3)] = (3/10 + 4/10) × 7,920 = 7 × 7,920 = 7 × 792 = 5,544 repeat visitors.

9. 100% - 40% - 45% = 15% of pet owners have birds. If pet owners represent 80% of the class then 80% × 15% × C = 6 students in class who have birds where C is the number of students in class.
(4/5)(3/20)C = 6
(3/25)C = 6
C = $\frac{25\times6}{3}$ = 25 × 2 = 50 students in class

10. 37.5% = 3/8. If Max is short 3/8 the price of two video games then...
M = (1 - 3/8) × 2V where M = the amount of money Max has and V = price of the video game. Also, V + $35 = M if Max has $35 left after buying 1 video game. There are two variables and two equations so solve the system of equations for V.

M = (5/8)2V = 10/8V = 5/4V
Substitute the value of M into the 2nd equation.
V + 35 = 5/4V
5/4V - V = 35
V(5/4 - 1) = 35
V(1/4) = 35
V = $140

KEY CONCEPTS:

Learn to setup and solve word problems related to fractions, ratios, and percent as well as integers.