PERCENT REVIEW

Name: _____ Din: _____ Date: _____

On a seperate sheet of paper do the following questions:
Q# 1-37 (ODD)

Practice

Copy and complete the table.

	Percent	Fraction	Decimal
1.	50%		
2.		$\frac{1}{4}$	
3.	120%		
4.		$\frac{11}{10}$	
5.	300%		
6.		$\frac{3}{2}$	
7.			1.6
8.	105%		
9.			2

Write as decimals.

10. 200% **11.** 400% **12.** 150%
13. 500% **14.** 110% **15.** 115%
16. 125% **17.** 101% **18.** 250%

Write as percents.

19. $\frac{6}{5}$ **20.** $\frac{7}{4}$ **21.** $\frac{5}{2}$
22. 3 **23.** 1.5 **24.** 2.6

Calculate.

25. 50% of 80 **26.** 200% of 400
27. 300% of 60 **28.** 175% of 1200
29. 106% of 4000 **30.** 120% of 250

Problems and Applications

31. A magazine sells for $6.00. Last year it sold for $5.00.
a) What is the percent increase over last year's price?
b) What percent of the old price is the new price?

32. A box of cereal was enlarged to contain 540 g. The original box contained 400 g.
a) What is the percent increase over the original box?
b) What percent of the old size is the new size?

33. The Earth is approximately 150 000 000 km from the sun. Neptune is approximately 4 500 000 000 km from the sun. What percent is Neptune's distance from the sun of the Earth's distance from the sun?

34. The Yukon Territory covers about 5% of the area of Canada. Express Canada's area as a percent of the area of the Yukon Territory.

35. A newspaper recently reported that the most fuel-efficient car required 5.4 L of gas for every 100 km. The most gas required by a car was reported as 22.7 L for every 100 km. What percent of the gas required for the most fuel-efficient car is the gas required for the least fuel-efficient car? Express your answer to the nearest percent.

36. American bison are the first animals to be saved from extinction by breeding them in captivity. In 1830, there were about 60 000 000 bison. By 1894, there were 100. Now there are about 90 000.
a) What percent of the bison population in 1830 is the bison population today?
b) What percent of the bison population in 1894 is the bison population today?

37. The Mackenzie River and the Columbia River are 2 of the longest rivers in Canada. The length of the Mackenzie River is 212% of the length of the Columbia River. The Columbia River is 2000 km long. How long is the Mackenzie River?

38. What is wrong with each statement?
a) The price increased by 200%, which means it doubled.
b) A dollar is worth 400% more than a quarter.
c) If the new price is 125% of the old price, the old price was 75% of the new price.

39. Write a problem that involves a percent greater than 100%. Have a classmate solve your problem.

Do Q# 1-23 (Even)

Practice

Express the following percents as decimals.

1. 9% **2.** 12% **3.** 6%

4. 14% **5.** $8\frac{1}{2}\%$ **6.** $11\frac{1}{4}\%$

7. $14\frac{3}{4}\%$ **8.** $20\frac{1}{2}\%$ **9.** $6\frac{9}{10}\%$

Express as fractions of a year.

10. 73 days **11.** 20 weeks, 6 d

12. 219 d **13.** 292 d

14. 30 d **15.** 5 weeks

16. 60 d **17.** 90 d

Problems and Applications

18. Michel received a scholarship of $250 for his high marks in school. He plans to deposit the money for 9 months in an account that pays 8% interest per year.
a) How much interest will Michel earn in 9 months?
b) How much money will he have altogether in 9 months?

19. Hania borrowed $135 for 60 d, at 13% interest per year.
a) Calculate the simple interest she will owe.
b) What will be the total amount that Hania will have to repay after 60 d?

20. The student council invested $6000 of the money collected as student activity fees. The council invested the first $4000 at 12% for 90 d and the remainder at 14% for 30 d. Calculate the total interest earned.

21. Find the total interest earned when $3000 is invested for 90 d at 10%, and then the total amount is reinvested for 60 d at 12.5%.

22. Greg wants to use the interest from his savings to buy a cassette player for $225. He invests $1500 at 10% simple interest per year. How long will he have to wait to buy the cassette player?

23. Raisa earns $100 a year in interest from her savings. They are invested at 8% simple interest per year. Calculate how much she has in her savings.

24. a) Consult the financial section of a newspaper to find the bank or trust company that pays the best rate of interest.
b) For what period of time is interest usually quoted?
c) Explain the difference between savings accounts and guaranteed investment certificates (GICs).

How to Calculate Simple Interest

Interest Earned = Principal Amount × (Interest Rate × Time)

$300 @ 5% for 5yrs ⇒ $300 \times (0.05 \times 5)$

$= 300 \times 0.25$

$= 75$

Interest Earned = $75
Total after 5yr = $375