

Use this proportion to solve percent problems. name _____

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

Directions: For each Part, show proportion.
Solve each proportion.

Part A:

Find the percent of each number, using a proportion.

10. 40% of 700

11. 25% of 4,800

12. 55% of 165

13. 50% of 492

14. 11% of 300

15. $12\frac{1}{2}\%$ of 72

Part B:

Find each answer.

1. 45% of what number is 135?

3. 15% of what number is 84?

5. 562 is 50% of what number?

2. 33 is 75% of what number?

4. 54 is 40% of what number?

6. 100 is 2% of what number?

Part C:

Find each percent.

1. What percent of 80 is 4?

2. What percent of 56 is 7?

3. What percent of 60 is 15?

4. What percent of 100 is 5?

5. What percent of 72 is 27?

6. What percent of 600 is 12?

Write each as a decimal. Round to the thousandths place.

1) 90%

2) 0.3%

3) 115.9%

4) 9%

Write each as a percent. Round to the nearest tenth of a percent.

9) 0.452

10) 0.006

11) 3.63

12) 0.05

13) 4.78

14) 0.1

Write each as a fraction.

17) 25%

18) 70%

19) 93%

20) 58%

21) 50%

22) $66.\overline{6}\%$

Write each as a percent. Use repeating decimals when necessary.

27) $\frac{1}{2}$

28) $\frac{1}{8}$

29) $\frac{2}{3}$

30) $\frac{1}{100}$

31) $2\frac{1}{10}$

32) $\frac{3}{8}$

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(20)

(22)

(24)

(26)

(28)

(40)

	Percent	Decimal	Fraction
1.	52%		
2.		.12	
3.			$\frac{3}{20}$
4.	25%		
5.		.75	
6.			$\frac{1}{2}$
7.		.06	
8.			$\frac{2}{15}$
9.	36.5%		
10.	120%		

EXTRA PRACTICE 6-1

PERCENTS AND PROPORTIONS

 EXERCISES

Write and solve a proportion.

1. 55% of 125 is what number? _____
 2. 16.8 is what percent of 28? _____
 3. What percent of 48 is 36? _____
 4. 28% of 34 is what number? _____
 5. 14 is 15% of what number? _____
 6. 125 is what percent of 200? _____
 7. 12% of 16 is what number? _____
 8. What percent of 81 is 9? _____
 9. What number is 64% of 80? _____
 10. $\frac{1}{4}$ % of what number is 4? _____
 11. $10\frac{1}{2}$ % of 50 is what number? _____
 12. 3.5 is 20% of what number? _____
 13. What percent of 3.7 is 2.96? _____
 14. What number is 43% of 70? _____
 15. 3.6 is what percent of 72? _____
 16. 5.76 is 24% of what number? _____
 17. 92% of what number is 82.8? _____
 18. $66\frac{2}{3}$ % of what number is 24? _____
 19. What number is 82% of 66? _____
 20. 108 is what percent of 144? _____
 21. $78\frac{1}{2}$ % of what number is $39\frac{1}{4}$? _____
 22. 4% of what number is 6? _____
 23. 17.1 is what percent of 38? _____
 24. What percent of 42 is 28.56? _____
25. **WEATHER** Last February it snowed 12 out of 28 days. What percent of days did it snow last February? _____
26. Andrea left a \$4.50 tip for a bill of \$25.00. What percent of the bill did she leave as a tip? _____

FITNESS Last Monday 38 of the 80 members who came to the health club attended an aerobics class. Last Tuesday 40% of the 105 members attended an aerobics class.

27. On which day did the greatest percentage of members attend an aerobics class?

28. On which day did the greatest number of members attend an aerobics class?

Sale Prices/Sales Tax

Name _____

Neatly number and show all work on your own paper.

Sale 30% off all regular prices



\$12.50



\$38.00



\$20.50



\$85.00

1. Find the sale price for each of the above items. Label each answer.
2. Find the cost of each item including tax.
3. Find the total cost, including tax, of purchasing all items together.
4. Find the total cost with tax if all 4 items were purchased at regular price.

Sale 25% off regular prices



\$43.00



\$250.00



\$300.00



\$125.00

5. Find the sale prices for each of the above items. Label each answer.
6. Find the price for each item including tax.
7. Find the total cost, including tax, for purchasing all 4 items on sale.
8. Find the total cost, including tax, for purchasing all 4 items at reg price.

Name: _____

Date: _____

Block: _____

Sales Prices/Sales Tax

Tax = 6.25%

	Hat	Shoes	Shirt	Boots
① Sales price:				
tax :				
② total cost: (sales price + tax)				

③ Total Cost of all items:

④ Total cost if items are purchased at regular price

	Radio	Guitar	Drums	Keyboard
⑤ sales price:				
tax :				
⑥ total cost:				

⑦ total cost :

⑧ total cost if purchased :
at regular price

Name: _____

6.4 Part 2

Find the income tax and net pay for each.

7. Income: \$600/wk

Income tax rate: 28%

I. Tax: _____ Net Pay: _____

9. Income: \$425/wk

Income tax rate: 20%

11. Income: \$42,800/yr

Income tax rate: 24%

Find the property tax paid by each homeowner.

13. Home value: \$105,000

Property tax rate: 3% _____

15. Home value: \$98,000

Property tax rate: 2% _____

Find the sales tax rate.

17. Price: \$32.28

Total cost: \$35.50 _____

8. Income: \$55,000/yr

Income tax rate: 22%

10. Income: \$28,000/yr

Income tax rate: 18%

12. Income: \$530/wk

Income tax rate: 16.5%

14. Home value: \$65,000

Property tax rate: 2% _____

16. Home value: \$145,500

Property tax rate: 3% _____

18. Price: \$1250.00

Total cost: \$1356.25 _____

Name: _____

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Find the income tax and net pay for each.

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Find the sales tax rate.

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Income tax rate: 18%

12. Income: \$530/wk

Income tax rate: 16.5%

14. Home value: \$65,000

Property tax rate: 2% _____

16. Home value: \$145,500

Property tax rate: 3% _____

18. Price: \$1250.00

Total cost: \$1356.25 _____

EXTRA PRACTICE 6-5
SIMPLE INTEREST

EXERCISES

Find the interest and the amount due.

	Principal	Annual rate	Time	Interest	Amount due
1.	\$550.00	6%	2 yr		
2.	\$55.00	4.5%	6 mo		
3.	\$1450.00	8%	4 yr		
4.	\$3000.00	9.5%	18 mo		
5.	\$9450.50	4.6%	24 mo		
6.	\$75.50	4%	6 mo		
7.	\$10,900.00	10.5%	5 yr		
8.	\$865.00	12%	3 yr		
9.	\$2400.75	15%	6 yr		
10.	\$5764.00	16.5%	30 mo		

Find the rate of interest.

11. Principal: \$302.50

Interest: \$30.20

Time: 2 yr _____

13. Principal: \$10,500.00

Interest: \$1968.75

Time: 18 mo _____

15. Principal: \$14,500.00

Interest: \$5220.00

Time: 54 mo _____

12. Principal: \$1250.00

Interest: \$318.75

Time: 3 yr _____

14. Principal: \$2895.50

Interest: \$579.10

Time: 5 yr _____

16. Principal: \$1400.00

Interest: \$332.50

Time: 30 mo _____

EXTRA PRACTICE 6-6

COMMISSION

 EXERCISES

Complete the table.

	Sale	Commission rate	Commission
1.	\$1500.00	2%	
2.	\$700.00		\$56.00
3.		8%	\$48.40
4.	\$460.00		\$23.00
5.	\$1235.00	4%	
6.		3.5%	\$128.80
7.	\$800.00		\$42.00
8.	\$950.00	7.5%	
9.	\$325.00	$2\frac{1}{2}\%$	
10.	\$3055.00		\$213.85

Find the total income.

- | | |
|--|--|
| 11. Base salary: \$350/wk
Total sales: \$2500/wk
Commission rate: 3% _____ | 12. Base salary: \$900/mo
Total sales: \$15,000/mo
Commission rate: 5.5% _____ |
| 13. Base salary: \$15,000/yr
Total sales: \$25,000/yr
Commission rate: 4% _____ | 14. Base salary: \$1250/mo
Total sales: \$3000/mo
Commission rate: 8.2% _____ |
| 15. Base salary: \$20,000/yr
Total sales: \$54,560/yr
Commission rate: 12% _____ | 16. Base salary: \$225/wk
Total sales: \$1750/wk
Commission rate: 6% _____ |

Name _____

Date _____

EXTRA PRACTICE 6-7

PERCENT OF INCREASE AND DECREASE

EXERCISES

Find the percent of increase.

- | | |
|---|--|
| 1. Original rent: \$450
New rent: \$495 _____ | 2. Original price: \$0.50
New price: \$0.65 _____ |
| 3. Original price: \$220
New price: \$286 _____ | 4. Original weight: 110 lb
New weight: 132 lb _____ |
| 5. Original price: \$48
New price: \$60 _____ | 6. Original number: 70
New number: 98 _____ |
| 7. Original fare: \$140
New fare: \$210 _____ | 8. Original price: \$16
New price: \$28 _____ |
| 9. Original price: \$55
New price: \$66 _____ | 10. Original population: 980
New population: 1127 _____ |
| 11. Original airfare: \$225
New airfare: \$270 _____ | 12. Original score: 80
New score: 84 _____ |

Find the percent of decrease.

- | | |
|---|---|
| 13. Original score: 190
New score: 152 _____ | 14. Original weight: 180 lb
New weight: 162 lb _____ |
| 15. Original price: \$35
New price: \$28 _____ | 16. Original airfare: \$340
New airfare: \$255 _____ |
| 17. Original population: 600
New population: 510 _____ | 18. Original enrollment: 360
New enrollment: 342 _____ |
| 19. Original price: \$165
New fare: \$99 _____ | 20. Original number: 80
New number: 44 _____ |
| 21. Original membership: 75
New membership: 60 _____ | 22. Original price: \$50
New price: \$45 _____ |
| 23. Original time: 40 min
New time: 38 min _____ | 24. Original price: \$60
New price: \$51 _____ |

Name: _____

Chp6 test Practice

1. Jeff works as a salesperson for a lawn care company. He earns a **base salary** of \$1250 every two weeks. He also earns a **4.65% commission** on the value of lawn care products that he sells.

Part A: Over the last two weeks, Jeff sold \$15,000 worth of lawn care products. What is his total income for the pay period?

(You need to find commission first and then add that value to salary)

Part B: Suppose Jeff lives in a state that charges 7.5% state income tax. How much in taxes will he have to pay for the two week period?

2. Noriko opened a savings account that pays an annual simple interest rate of 3.25%. Her initial deposit into the account was \$1500.

Part A: If Noriko leaves her deposit of \$1500 alone for 18 months, how much interest will she earn?

Part B: How much **money** will be in Noriko's account after a period of 2 years?

Name: _____

Chp6 test Practice

1. Jeff works as a salesperson for a lawn care company. He earns a **base salary** of \$1250 every two weeks. He also earns a **4.65% commission** on the value of lawn care products that he sells.

Part A: Over the last two weeks, Jeff sold \$15,000 worth of lawn care products. What is his total income for the pay period?

(You need to find commission first and then add that value to salary)

Part B: Suppose Jeff lives in a state that charges 7.5% state income tax. How much in taxes will he have to pay for the two week period?

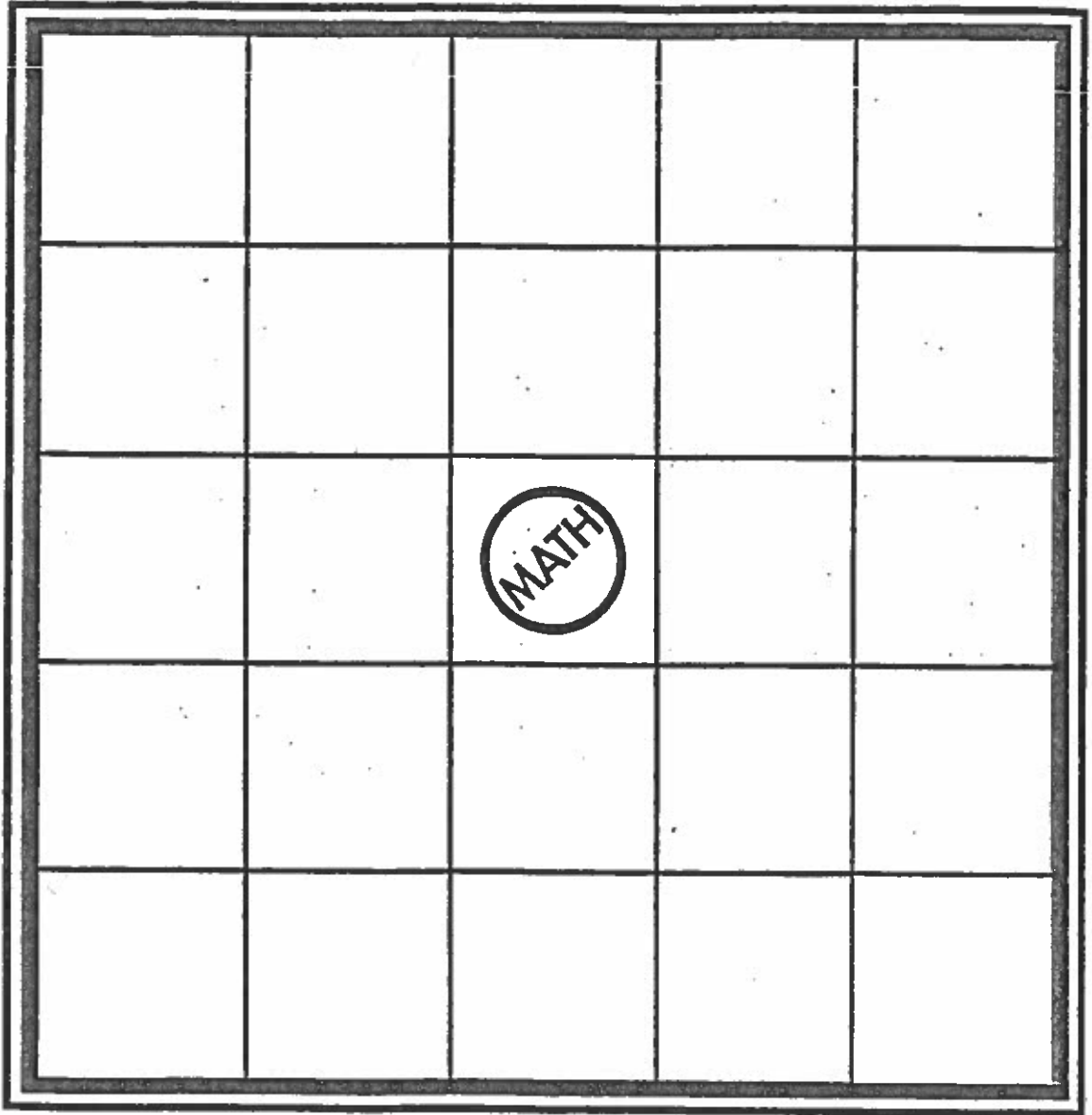
2. Noriko opened a savings account that pays an annual simple interest rate of 3.25%. Her initial deposit into the account was \$1500.

Part A: If Noriko leaves her deposit of \$1500 alone for 18 months, how much interest will she earn?

Part B: How much **money** will be in Noriko's account after a period of 2 years?

Matho Name :

Chapter 6 Matho



commission rate	8.5	9	\$20	\$190.40	35%
net pay	20%	49.4	\$41,000	7.5%	65%
discount	24%	\$50.28	\$20.40	60%	46%
simple interest.	4.06	\$40.27	\$9,922.50	36%	2.61