

# Percentages Homework

Algebra 1

Write your answers on notebook paper.

Change the percentages into decimals.

Examples:  $54\% = 0.54$        $3\% = 0.03$

1.  $21\%$   $0.21$

4.  $7\%$   $0.07$

2.  $85\%$   $0.85$

5.  $4.5\%$   $0.045$

3.  $10\%$   $0.1$

6.  $130\%$   $1.3$

Change decimals to percentages.

Example:  $0.392 \times 100\% = 39.2\%$

7.  $0.125$   $12.5\%$

8.  $0.004$   $0.4\%$

9.  $1.25$   $125\%$

## Decimal Percent $\times$ Total = Part

Use the formula above to solve each problem.

Write the equation with the numbers from the problem. Show the steps you used to solve for the variable.

You may use a calculator, but you have to write down the problem and the steps.

10. What is  $15\%$  of  $90$ ?  $13.5$

16.  $68$  is what percent of  $85$ ?  $80\%$

11. What is  $4\%$  of  $280$ ?  $11.2$

17.  $15$  is what percent of  $200$ ?  $7.5\%$

12. What is  $\frac{1}{2}\%$  of  $50$ ?  $0.25$

18.  $27$  is  $25\%$  of what number?  $108$

13. What is  $120\%$  of  $48$ ?  $57.6$

19.  $76$  is  $110\%$  of what number?  $69.09$

14.  $16$  is what percent of  $10$ ?  $160\%$

20.  $8$  is  $2\frac{1}{2}\%$  of what number?  $320$

15.  $7$  is what percent of  $350$ ?  $2\%$

21.  $20$  is  $8\%$  of what number?  $250$

22. Douglas Parker sold a house to a customer for  ~~$\$280,500$~~   $\$280,500$ . Mr. Parker received a  $3\%$  commission on the sale. How much did he receive?  $\$8415$

23. Find the  $8.25\%$  sales tax on a refrigerator that cost  $\$965$ .  $\$79.61$

24. The Salinas family spent  $10.4\%$  of their income one year for medical expenses. If their income was  $\$52,790$ , how much did they spend on medical care?  $\$5490.16$

25. Best Buy put flat screen TVs on sale for  $15\%$  off. If the original price was  $\$860$ , what is the sale price?  $\$731$

26. Steph Curry scored on  $28$  of the  $64$  field goal shots he attempted in the 2021-2022 season. What percentage of his shots scored?  $44\%$

27. An engineer went to his boss and asked for a  $\$2100$  raise. This was a  $4\%$  increase in his salary. What was he making before the raise?  $\$52,500$

28. Academy buys running shoes for  $\$54$  and marks them up  $35\%$ . What is the amount of markup and what is the retail price?   
 markup =  $\$18.90$       retail price =  $\$72.90$

## Simple Interest = Principal (Annual rate) (Years)

Use the formula above to complete the table.

Write the equation with the numbers from the problem. Show the steps for solving the problem.

	Interest	Principal	Annual rate	Years
32.	\$600.00	\$4,000	3%	5
33.	\$6480.00	\$12,000	4.5%	12
34.	\$4480.00	\$35,000	3%	4
35.	\$5103.00	\$4200	8.1%	15
36.	\$22,500.00	\$250,000	$\frac{1}{2}\%$	18