

## Basic Percentages and Fractions Practice #5

1. Write 28% as a fraction in its simplest terms.
2. What is 0.95 as a percentage?
3. What is  $\frac{17}{60}$  as a percentage?
4. Fill in the missing value:  $\frac{2}{9} = \frac{18}{?}$
5. How many fifths is sixteen twentieths?
6. What is 8% of 12.5?
7. What is five-sixths of 21? Answer in decimal form.
8. Rachel was absent from school on 12 out of the last 60 days. In simplest form, what fraction of days was she absent?
9. Out of every twenty houses in a town seven are rented. What is this as a percent?
10. NZ has 5.1 million cell phones. How many phones is 5.3% of that?
11. Gregory eats one half of his bag of chips at morning break and one third of the bag at lunch break. What fraction of the bag of chips remains?
12. If 19 students pass a test and 8 fail it, what is the pass rate as a percentage?
13. If an investment of \$20,000 pays 3.95% interest, how much does it pay?
14. Increase 580 by 75%.
15. Decrease 1300 by 0.8%.
16. Bill bought a \$16,000 car with \$2,000 deposit, and had to pay off one-eighth of the remainder every month. What was his monthly payment?
17. A car dealer offers a 8% price reduction for payment in cash. How much would a \$35,000 car cost if someone paid in cash?
18. If land values increased at the rate of 20%, what would be the new price on a piece of land which was originally worth \$60,800?
19. If 8 students got E's and that was  $\frac{1}{4}$  of all the students, how many students were there?
20. A car's price drops from \$3000 to \$2,550. What is the percentage decrease?

## Answers: Basic Percentages and Fractions Practice #5

There are usually many ways of answering these questions (but only one correct answer).

1.  $28\% = \frac{28}{100} = \frac{14}{50} = \frac{7}{25}$

2.  $0.95 \times 100 = \mathbf{95\%}$

3.  $\frac{17}{60} = 17 \div 60 = 0.283333$ .  $0.283333 \times 100 = \mathbf{28.3\%}$  (rounded)

4.  $\frac{2}{9} = \frac{18}{81}$  (top and bottom  $\times 9$ )

5.  $\frac{16}{20} = \frac{4}{5}$  (top and bottom  $\div 4$ ), so **four** fifths

6.  $8\%$  of  $12.5 = \frac{8}{100} \times 12.5 = \mathbf{1}$

7.  $\frac{5}{6} \times 21 = \frac{105}{6} = \mathbf{17.5}$

8.  $\frac{12}{60} = \frac{1}{5}$  of the days

9.  $7$  out of  $20 = \frac{7}{20} = 0.35$                        $0.35 \times 100 = \mathbf{35\%}$

10.  $5.3\%$  of  $5,10,000 = \frac{5.3}{100} \times 510000 = \mathbf{270,300}$  phones

11.  $1 - \frac{1}{2} - \frac{1}{3} = \frac{1}{6}$  remaining

12.  $19$  out of total of  $27 = \frac{19}{27} = 0.70370$                        $0.70370 \times 100 = \mathbf{70.37\%}$

13.  $3.95\%$  of  $20000 = \frac{3.95}{100} \times 20000 = \mathbf{\$790}$

14.  $75\%$  of  $580 = \frac{75}{100} \times 580 = 435$ .                      Add this to original  $580$  gives **1015**

15.  $0.8\%$  of  $1300 = \frac{0.8}{100} \times 1300 = 10.4$                       Take this from original  $1300$  gives **1289.6**

16.  $16000 - 14000$  to pay off.  $\frac{1}{8}$  of  $14000 = \frac{1}{8} \times 14000 = \mathbf{\$1750}$  per month

17.  $8\%$  of  $\$35000 = \frac{8}{100} \times 35000 = 2800$ .                      Subtract this from original  $35000 = \mathbf{\$32,200}$

18.  $20\%$  of  $\$60800 = \frac{20}{100} \times 60800 = 12160$ . Add this to original  $60800 = \mathbf{\$72,960}$

19.  $\frac{1}{4}$  of total =  $32$                       As  $\frac{1}{4} \times 32 = 8$ , there must have been **32** students

20. The fall is  $450$  ( $3000 - 2550$ ) from a **start** total of  $3000 = \frac{450}{3000} = 0.15$   
 $0.15 \times 100 = \mathbf{15\%}$  decrease