

Example—

1. What is the interest on \$350 for 60 days at 6%?

SOLUTION— EXPLANATION—6% interest on any sum for 60 days is 1%, or \$350 pointed off as 1 hundredth of it. (Rule 4.) 1% of any number is obtained by hundredths = \$3.50. pointing off two decimal places from the right of the number. \$3.50 - $\frac{1}{3}$ of \$3.50 = \$3.45 Answer.

2. What is the interest on \$1500 for 93 days at 6%?

SOLUTION— EXPLANATION—Interest for 30 days is $\frac{1}{2}$ that for 60 and for 3 days is $\frac{1}{10}$ that for 30 days. By uniting the partial interest products the entire interest is obtained.

\$1500 = Interest for 60 days.

750 = Interest for 30 days.

75 = Interest for 3 days.

\$2325 = Interest for 93 days.

\$23.25 - $\frac{1}{3}$ of \$23.25 = \$22.93 Answer.

3. What is the interest on \$450.75 for 1 year 111 days at 6%?

Solution—

1 year 111 days = 476 days.

\$4.5075 = Interest for 60 days

Shorter Process.

\$4.508

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|----------|---|---|-----|---|-----------|----------|
| \$315525 | = | " | 420 | " | (60 × 7) | \$31.556 |
| 225375 | = | " | 30 | " | (60 ÷ 2) | 2.254 |
| 1126875 | = | " | 15 | " | (30 ÷ 2) | 1.127 |
| 75125 | = | " | 10 | " | (30 ÷ 3) | .751 |
| 075125 | = | " | 1 | " | (10 ÷ 10) | .075 |

\$35759500 = " 476 days.

\$35.763

\$35.763 - $\frac{1}{3}$ of \$35.763 = \$35.27 Answer.

Note—1. For business purposes it is sufficiently exact to carry the work to mills, as in the shorter process.

2. In this process when the decimal in the fourth places is less than 5 it is rejected; when 5 or greater than 5, the figure in the third decimal place is increased by one, and the decimals to the right of the third decimal place are rejected.

To find the interest at any other rate than 6% by this method, first find the interest at 6%, and then increase or diminish the result by as many sixths as the given rate is units greater or less than 6%. Thus, for 7% add $\frac{1}{6}$, for 9% add $\frac{2}{6}$ or $\frac{1}{3}$, for 4% subtract $\frac{2}{6}$ or $\frac{1}{3}$, etc.

4. What is the interest on \$250 for 105 days at 7 $\frac{1}{2}$ %?

Solution—

\$250 = 60 days.

125 = 30 days.

625 = 15 days.

4375 = 105 days at 6%

1094 = 105 days at 1 $\frac{1}{2}$ %

5469 = 105 days at 7 $\frac{1}{2}$ %

\$5.469 - $\frac{1}{3}$ of \$5.469 = \$5.39 Answer.

Explanation—105 days are equal to 60 days plus 30 days plus 15 days. The interest on \$250 for 60 days is \$2.50, divided by 2 is \$1.25, the interest for 30 days, which amount divided by 2 gives \$.625, the interest for 15 days. The entire interest at 6% increased by $\frac{1}{2}$ of itself is the interest at 7 $\frac{1}{2}$ %.

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By Six Per Cent Method Find the Interest on :

- | | |
|--|--|
| 1. \$360 for 92 days at 6% | 11. \$1200 for 123 days at 6% |
| 2. \$520 for 36 days at 6 $\frac{1}{2}$ % | 12. \$960 for 146 days at 5% |
| 3. \$720 for 25 days at 5 $\frac{1}{2}$ % | 13. \$320 for 95 days at 7% |
| 4. \$960 for 116 days at 4% | 14. \$480 for 292 days at 8% |
| 5. \$480 for 314 days at 3% | 15. \$560 for 165 days at 9% |
| 6. \$125 for 124 days at 7% | 16. \$940 for 73 days at 4 $\frac{1}{2}$ % |
| 7. \$3200 for 120 days at 6% | 17. \$120 for 90 days at 6% |
| 8. \$1260 for 142 days at 7% | 18. \$340 for 83 days at 7% |
| 9. \$3120 for 314 days at 4% | 19. \$160 for 75 days at 8% |
| 10. \$1460 for 215 days at 4 $\frac{1}{2}$ % | 20. \$320 for 62 days at 9% |