

Name \_\_\_\_\_

Date \_\_\_\_\_

## Calculating Interest - Guided Lesson Explanation

### Explanation#1

|       | I                        | P    | r    | t |
|-------|--------------------------|------|------|---|
| 5%    | $(0.20x)(0.05x) = 0.01$  | 0.20 | 0.05 | 1 |
| 7%    | $(0.30x)(0.07x) = 0.021$ | 0.30 | 0.07 | 1 |
| 15%   | $(0.50x)(0.15x) = 0.075$ | 0.50 | 0.15 | 1 |
| total | \$1050                   | x    |      |   |

Now solve this

$$0.01x + 0.021x + 0.075x = 1050$$

Now solve for the value  $x$

$$x (0.106) = 1050$$

$$x = \frac{1050}{0.106}$$

$$x = \$9,905.66$$

### Explanation#2

Formula to calculate the simple interest is:-

$$SI = \frac{P \times R \times T}{100}$$

$$SI = \frac{53,200 \times 4 \times 2}{100}$$

$$SI = \$4,256$$

Total cost = Principal + interest

$$= \$53,200 + \$4,256$$

$$= \$57,456$$

So, the answer is \$57,456.



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### Explanation#3

Formula to calculate the simple interest is: -

$$SI = \frac{P \times R \times T}{100}$$

$$SI = \frac{25,420 \times 5 \times 8}{100 \times 12}$$

$$SI = \$847.33$$

So, the answer is \$847.33

