

Percent Word Problems Worksheet

1. Theresa and Isaiah are comparing the number of pages that they read for pleasure over the summer. Theresa read 2,210 pages, which was 85% of the number of pages that Isaiah read. How many pages did Isaiah read?

2. In a parking garage, the number of SUVs is 40% greater than the number of non-SUVs. Gina counted 98 SUVs in the parking garage. How many vehicles were parked in the garage?

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1. Theresa and Isaiah are comparing the number of pages that they read for pleasure over the summer. Theresa read 2,210 pages, which was 85% of the number of pages that Isaiah read. How many pages did Isaiah read?

Quantity = Percent \times Whole.

Let p represent the number of pages that Isaiah read.

$$2,210 = \frac{85}{100} \cdot p$$

$$2,210 = \frac{17}{20} \cdot p$$

$$2,210 \cdot \frac{20}{17} = \frac{17}{20} \cdot \frac{20}{17} \cdot p$$

$$130 \cdot 20 = 1 \cdot p$$

$$2,600 = p$$

Isaiah read 2,600 pages over the summer.

2. In a parking garage, the number of SUVs is 40% greater than the number of non-SUVs. Gina counted 98 SUVs in the parking garage. How many vehicles were parked in the garage?

40% greater means 100% of the non-SUVs plus another 40% of that number, or 140%.

Quantity = Percent \times Whole. Let d represent the number of non-SUVs in the parking garage.

$$98 = \frac{140}{100} \cdot d$$

$$98 = \frac{7}{5} \cdot d$$

$$98 \cdot \frac{5}{7} = \frac{7}{5} \cdot \frac{5}{7} \cdot d$$

$$14 \cdot 5 = 1 \cdot d$$

$$70 = d$$

There are 70 non-SUVs in the parking garage.

The total number of vehicles is the sum of the number of the SUVs and non-SUVs.

$70 + 98 = 168$. There is a total of 168 vehicles in the parking garage.