

3 TAKS PREPARATION



TAKS Obj. 9
TEKS 8.1.B

REVIEWING FRACTION, DECIMAL, AND PERCENT PROBLEMS

Use the following table to help you convert between fractions, decimals, and percents.

Conversion	Example
To write a decimal as a percent, move the decimal point two places to the right and include a percent symbol.	$0.7 = 0.70 = 70\%$
To write a fraction as a percent, rewrite the fraction using a denominator of 100.	$\frac{3}{5} = \frac{3(20)}{5(20)} = \frac{60}{100} = 60\%$
To write a percent as a decimal, move the decimal point two places to the left and remove the percent symbol.	$22\% = 22\% = 0.22$
To write a fraction as a decimal, divide the numerator by the denominator.	$\frac{7}{8} = 7 \div 8 = 0.875$

EXAMPLE

Maria, Jose, Tom, and Liz painted the outside of a house that has an area of 2600 square feet. Maria painted one-fifth of the area, Jose painted 0.25 of the area, Tom painted 29% of the area, and Liz painted the remaining area of the house. Who painted the greatest area of the house?

Solution

STEP 1 Write the area that was painted by each of the four people as a percent.

$$\text{Portion painted by Maria} = \frac{1}{5} = \frac{20}{100} = 20\%$$

$$\text{Portion painted by Jose} = 0.25 = 25\%$$

$$\text{Portion painted by Tom} = 29\%$$

$$\text{Portion painted by Liz} = 100\% - 20\% - 25\% - 29\% = 26\%$$

STEP 2 Compare the percents.

► Because 29% is greatest, Tom painted the greatest area of the house.

CHECK Find the actual area painted by each person.

$$\text{Area painted by Maria} = 0.2(2600) = 520 \text{ ft}^2$$

$$\text{Area painted by Jose} = 0.25(2600) = 650 \text{ ft}^2$$

$$\text{Area painted by Tom} = 0.29(2600) = 754 \text{ ft}^2$$

$$\text{Area painted by Liz} = 0.26(2600) = 676 \text{ ft}^2$$

The calculations show that Tom painted the greatest area.