**Grade 8 Math**

Percent (%)

Consider **Percent** as a special kind of **fraction.**

A fraction which has a denominator of 100.

The 100 is replaced by the (%) sign and vise versa.

Example: $\frac{25}{100}$ becomes 25%.............and 67% becomes $\frac{67}{100}$

You need to be able to **convert** a **Percent** into a **Fraction** and into a **Decimal** number.

Practice this skill using the handout (Percent, Fractions, Decimals).

Converting a fraction (where the denominator) is **not** 100 into an **equivalent** fraction which has a denominator of 100

Example: $\frac{25}{37}$ = $\frac{x}{100}$ you can try “cross multiplication” $\frac{25 x 100}{37}$ or use the algebra skills you know

Try it here $\frac{25}{37}$ = $\frac{x}{100}$ How does “cross multiplication” resemble your algebraic steps?

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You are shopping and you need to make some quick mental estimates.

What STEM is mental estimates? \_\_\_\_\_\_\_\_\_\_\_\_

Write here ***word for word*** what the STEM is

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Calculate the following percentages.

**NO calculator**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cost of item** | **% Discount** | **$$$ Discount** | **How much do you pay $$$$** | **Sum of column 3 & 4****Should = cost of item** |
| $80.00 | 10 | 8 | 80 – 8 = 72 | 8 + 72 = 80 |
| $ 100.00 | 10 |  |  |  |
| $50.00 | 10 |  |  |  |
| $30.00 | 10 |  |  |  |
| $200.00 | 10 |  |  |  |
| $5000.00 | 10 |  |  |  |
| $56.00 | 10 |  |  |  |

Explain how you can quickly calculate 10% of any item?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Complete the tables**

**No** calculator

Use scrap paper

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cost of item** | **% Discount** | **$$$ Discount** | **How much do you pay $$$$** | **Sum of column 3 & 4****Should = cost of item** |
| $80.00 | 20 |  |  |  |
| $ 100.00 | 20 |  |  |  |
| $50.00 | 20 |  |  |  |
| $30.00 | 20 |  |  |  |
| $200.00 | 20 |  |  |  |
| $5000.00 | 20 |  |  |  |
| $56.00 | 20 |  |  |  |

Explain how you can quickly calculate 20% of any item?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cost of item** | **% Discount** | **$$$ Discount** | **How much do you pay $$$$** | **Sum of column 3 & 4****Should = cost of item** |
| $80.00 | 5 |  |  |  |
| $ 100.00 | 5 |  |  |  |
| $50.00 | 5 |  |  |  |
| $30.00 | 5 |  |  |  |
| $200.00 | 5 |  |  |  |
| $5000.00 | 5 |  |  |  |
| $56.00 | 5 |  |  |  |
|  |  |  |  |  |
| $80.00 | 30 |  |  |  |
| $ 100.00 | 30 |  |  |  |
| $50.00 | 30 |  |  |  |
| $30.00 | 30 |  |  |  |
| $200.00 | 30 |  |  |  |
| $5000.00 | 30 |  |  |  |
| $56.00 | 30 |  |  |  |
|  |  |  |  |  |
| $80.00 | 40 |  |  |  |
| $ 100.00 | 40 |  |  |  |
| $50.00 | 40 |  |  |  |
| $30.00 | 40 |  |  |  |
| $200.00 | 40 |  |  |  |
| $5000.00 | 40 |  |  |  |
| 56.00 | 40 |  |  |  |

Explain where you have used this skill in the past 4 weeks. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Where do you see yourself using this skill in the next 2 weeks?

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