

Problem 1

How do you represent 10% as a fraction?

(A) $\frac{10}{1} = 10$

(B) $\frac{1}{2} = 0.5$ (\$00.50)

(C) $\frac{1}{100} = 0.01$

(D) $\frac{1}{10} = 0.1 = \frac{10}{100}$

10% → "percent" → "per cent"
 $(10 / 100) = \frac{10}{100} = 0.1$
 • Reducing fractions
 • Common denominator
 • greatest common factor

$$\begin{aligned} 1 \times 10 &= 10 \\ 2 \times 5 &= 10 \end{aligned} \quad \left. \begin{array}{l} 1, 2, 5, 10 \end{array} \right\}$$

$$\$15/\text{hr} \rightarrow \frac{\$15}{1\text{hr}}$$

107%, 13%, 5.5%.

Problem 2

How do you represent 10% as a decimal?

(A) 0.10

(B) 1.0

(C) 0.001

(D) 10.0

10% → $\frac{10}{100} \rightarrow \frac{10.0}{100}$
 "move the decimal 2 places to the left"
 $\sqrt{10.0}$
 $0.10 = 0.1$

$$\$7.00 \quad \$7.00$$

13 → 13.0 → 13.00
 200 → 200.00 → \$200.00
 10 → 10.0

Problem 3

$$\$12.78 \text{ total}$$

There is a shirt you want that costs \$12.00. Volusia County sales tax is 6.5%. How much will the tax be?

~~(A)~~ \$0.12 "1% of \$12 is 0.12"

(B) \$1.20

(C) \$0.78

~~(D)~~ \$7.80 "50% of \$12 is \$6"
 $0.5 \times 12 = 6$

$$\$12.00$$

6.5% tax

$$\frac{6.5}{100} = 0.065$$

$$0.065 = 0.065$$

$$[0.065 \times 100 = 6.5\%]$$

% → per 100
 → out of 100
 → over 100
 $\frac{\cdot}{100}$

"2 places to the left"
 - 2 places bc 2 zeros in 100
 - to the left, bc division

[0.065 of \$12.00 → of = multiply (x, •, (x) 3 → mult. notation)
 6.5% of 12 is ? is = equals
 ? = unknown, possible answer,
 variable
 per = division, fraction

$$0.065 \times 12 = X$$

$$0.78 = X$$

$$X = 0.78$$

12% → 0.12

$$12 = 12.00 = 12.0 = 12.00 \dots$$

$$12.0\%$$

3.2%

0.05% 10017%

- 3.2% • Moving the decimal
• Convert to a fraction, calculator

- Moving the decimal -

- 3.2% ① 3.2 divided by 100
② Move decimal to the left
*WHY? Division
③ Move 2 places to the left
*WHY? 2 zeros in 100

0.03.2 } 0.032

- Convert to Fraction (calculator)

- 3.2% ① $\frac{3.2}{100}$ ② 0.032

107% , 13% , 5.5%

107% "107 percent"
107 divided by 100
 $107 \div 100$
 $107 / 100$
 $\frac{107}{100}$

$$13\% \rightarrow \frac{13}{100}$$

$$5.5\% \rightarrow \frac{5.5}{100}$$

[% \rightarrow dividing by 100]

percent \rightarrow per cent
per 100

0.7% }
22% }
5000% }

Problem 4

Including tax, what is the total amount you'll pay for the shirt in problem #3?

- (A) \$12.12
- (B) \$12.00
- (C) \$13.78
- (D) \$12.78

Problem 5

Yesterday, Rashed went to the grocery store to buy a few things. Some items were taxed at 6.5%, and some items were not taxed.

Water	\$2.99	not taxed
Apples	\$0.75	not taxed
Paper Towels	\$4.99	taxed
Soup	\$2.00	not taxed
Socks	\$5.50	taxed
Birthday Card	\$1.99	taxed

How much tax did Rashed end up paying?

- (A) \$1.18
- (B) \$8.11
- (C) \$0.81
- (D) \$0.65

What was the total amount that Rashed spent at the store?

- (A) \$19.03
- (B) \$18.22
- (C) \$17.41
- (D) \$19.40