FRACTION, DECIMAL, AND PERCENT PROBLEMS ON TAKS

Below are examples of fraction, decimal, and percent problems in multiple choice format. Try solving the problems before looking at the solutions. (Cover the solutions with a piece of paper.) Then check your solutions against the ones given.

1. Which of the following numbers is between $\frac{1}{3}$ and $\frac{3}{8}$?

  A 0.3159

  B 40%

  C $\frac{9}{25}$

  D $\frac{11}{36}$

Solution

Use decimals: $\frac{1}{3} = 0.\overline{3}$ and $\frac{3}{8} = 0.375$.

$\frac{9}{25} = 0.36$, which is between $0.\overline{3}$ and 0.375.

The correct answer is C.

Ⓐ Ⓑ ⓒ Ⓓ

2. A group of 5 salespeople earns 25% of all the money they bring in to their business. The salespeople then split the money, with each salesperson receiving one-fifth of the earnings. If the group brought in $8120 one day, how much did each salesperson earn?

  F $244

  G $406

  H $1624

  J $2030

Solution

The group of salespeople earned 25% of $8120, which is 0.25 • $8120, or $2030. Each salesperson earned one-fifth of this amount, or $\frac{\$2030}{5} = \$406$.

The correct answer is G.

Ⓕ ⓖ Ⓗ Ⓙ

3. At a restaurant, a 15% tip for the server is added to each bill. The server then gives $\frac{1}{5}$ of the tip to the busboy. If a bill without the tip is $20, how much does the busboy earn?

  A $0.60

  B $1.50

  C $3.00

  D $4.00

Solution

15% of $20 is 0.15 • $20, or $3, so the tip is $3. The busboy earns $\frac{1}{5}$ of $3, or $0.60.

The correct answer is A.

ⓐ Ⓑ ⓒ Ⓓ

4. Which of the following expressions does NOT equal 1.5?

  F $\frac{30}{20}$

  G 5% of 30

  H 15% of 10

  J $\frac{250}{150}$

Solution

$\frac{250}{150}$ simplifies to $\frac{5}{3}$, or approximately 1.67.

The correct answer is J.

Ⓕ Ⓖ Ⓗ ⓙ