SAT Math   *Easy*

No one tells you that the SAT is easy! But it's true; just look at some of these easy-level SAT math questions. Answers and explanations are included.
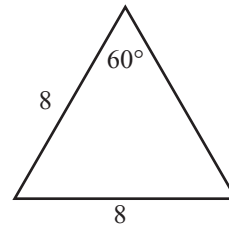
1. If $3x + y = 10$ and $y = 7x$, then $x =$

    (A) 1/10
    (B) 7/10
    (C) 1
    (D) 10/7
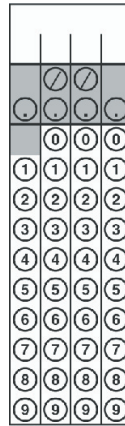   (E) 10

3. What is the perimeter of the triangle?

2. If Cal walks 4 miles per hour, how many miles does he walk in 45 minutes?

    (A) 3/4
    (B) 1
    (C) 2.5
    (D) 3
    (E) 11.25

4. Which of the following numbers is between $\frac{1}{5}$ and $\frac{1}{6}$?

    (A) 0.15
    (B) 0.18
    (C) 0.21
    (D) 0.22
    (E) 0.24

Each of the questions is explained below.

1. If $3x + y = 10$ and $y = 7x$, then $x =$

   (A) 1/10
   (B) 7/10
   (●) 1
   (D) 10/7
   (E) 10

Substitute 7x for y in the first equation:

   3x + y = 10
   3x + 7x = 10
   10x = 10
   x = 1

2. If Cal walks 4 miles per hour, how many miles does he walk in 45 minutes?

   (A) 3/4
   (B) 1
   (C) 2.5
   (●) 3
   (E) 11.25

First, change 1 hour into 60 minutes.

Next, set up a proportion:

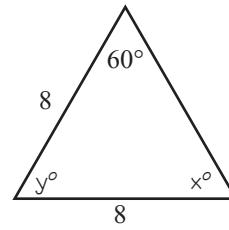$$\frac{4 \text{ miles}}{60 \text{ minutes}} = \frac{x \text{ miles}}{45 \text{ minutes}}$$

Finally, cross-multiply:

   60(x) = 45(4)
   60x = 180
   x = 3

3. What is the perimeter of the triangle?

The information provided in the figure indicates that the triangle is an isosceles triangle because two side lengths are equal. Thus their corresponding angles are equal. Angle x must also be 60°. So 60° + 60° + y° = 180°. Angle y is also 60°. Therefore, the triangle is not only an isosceles triangle, but an equilateral triangle. The side lengths are all equal:

   8 + 8 + 8 = 24.

4. Which of the following numbers is between $\frac{1}{5}$ and $\frac{1}{6}$?

   (A) 0.15
   (●) 0.18
   (C) 0.21
   (D) 0.22
   (E) 0.24

Convert 1/5 and 1/6 into their decimal equivalents:

   1/5 = 0.2
   1/6 = 0.167

The only answer choice less than 0.2 and greater than 0.167 is Choice (B).