

Chapter 2 – Fractions, Decimals, and Percentages on the SAT

Pre Test

1.) An employee of Green Garden Farm Shop randomly selects fruits to check for freshness. Only apples, oranges, pineapples, and pears were selected. One fourth of the fruits were apples and one third were oranges. Of the remaining fruits, one half were pineapples. If there were a total of 288 fruits selected, how many were pears?

- A) 60
- B) 72
- C) 96
- D) 144

2.) Heather has \$7.00 to buy pens and pencils. Pens cost \$0.80 each and pencils cost \$0.15 each, and there is no sales tax on this purchase. If Heather buys 6 pens, what is the maximum number of pencils she can buy?

/	○	○	○	○	○
.	○	○	○	○	○
0	○	○	○	○	○
1	○	○	○	○	○
2	○	○	○	○	○
3	○	○	○	○	○
4	○	○	○	○	○
5	○	○	○	○	○
6	○	○	○	○	○
7	○	○	○	○	○
8	○	○	○	○	○
9	○	○	○	○	○

3.) The owner of a landscaping business charges \$25,000 to plant grass, trees, and shrubs around the parking lot of a shopping center. If the owner must use 82% of this revenue to pay for salaries and supplies, what profit does she make?

- A) \$4500
- B) \$8200
- C) \$16,800
- D) \$20,500

4.) Dustin bought a stock at the beginning of 1995 valued at d dollars. At the beginning of 1996 the stock had increased in value by 7%. Between the beginning of 1996 and the beginning of 1997, the stock increased by an additional 15%. What was the value of Dustin's stock in the beginning of 1997 in terms of d ?

A) $\frac{d}{(0.07)(0.15)}$

B) $d(1.07)(1.15)$

C) $\frac{d}{(1.07)(1.15)}$

D) $d(0.93)(0.85)$

5.) A biologist estimates that the population of a certain species will increase by 2% every 20 years. If the current population in a specific forest is 8500, which of the following expressions represents the population y years from now?

A) $8500(1.02)^{20y}$

B) $8500(.02)^{20y}$

C) $8500(0.98)^{\frac{y}{20}}$

D) $8500(1.02)^{\frac{y}{20}}$

Answer Key:

1.) A

2.) 14

3.) A

4.) B

5.) D