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The discount price of a book is 20% less than the retail price. James manages to purchase the book at 30% off the discount price at a special book sale. What percent of the retail price did James pay?

- A) 42%
- B) 48%
- C) 50%
- D) 56%

$$A = P(1+r)^t$$

$$1 - .2 = .8$$

.7

$$.7 (.8 P)$$

$$.56 P$$

9

Each day, Robert eats 40% of the pistachios left in his jar at that time. At the end of the second day, 27 pistachios remain. How many pistachios were in the jar at the start of the first day?

- A) 75
- B) 80
- C) 85
- D) 95

$$.6 (.6 P) = 27$$

$$\frac{.36P}{.36} = \frac{27}{.36} \quad P = 75$$

10

Joanne bought a doll at a 10 percent discount off the original price of \$105.82. However, she had to pay a sales tax of  $x\%$  on the discounted price. If the total amount she paid for the doll was \$100, what is the value of  $x$ ?

- A) 2
- B) 3
- C) 4
- D) 5

$$100 = P (.9 (105.82))$$

$$\frac{100}{.9(105.82)} = P = \underline{1.05}$$

5%

11

In 2010, the number of houses built in Town A was 25 percent greater than the number of houses built in Town B. If 70 houses were built in Town A during 2010, how many were built in Town B?

$$125\% = 1.25$$

$$A = 1.25B \quad B = \frac{70}{1.25} = 56$$

$$70 = 1.25B$$

12

Over a two week span, John ate 20 pounds of chicken wings and 15 pounds of hot dogs. Kyle ate 20 percent more chicken wings and 40 percent more hot dogs. Considering only chicken wings and hot dogs, Kyle ate approximately  $x$  percent more food, by weight, than John. What is  $x$  (rounded to the nearest percent)?

A) 25

B) 27

C) 29

D) 30

	J	K
CW	20	$1.2(20) = 24$
HD	15	$1.4(15) = 21$
	35	45

$$45 = P(35)$$

$$1.29 = \frac{45}{35} = P$$