

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: 457cd6d8

In a sample, 80% of the items are faulty. There are 88 faulty items in the sample. How many total items are in the sample?

$$\begin{aligned} 0.8X &= 88 \\ X &= 110 // \end{aligned}$$

Question ID d708c5e3

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: d708c5e3

The population of City A increased by 7% from 2015 to 2016. If the 2016 population is  $k$  times the 2015 population, what is the value of  $k$ ?

- A. 0.07
- B. 0.7
- ~~C. 1.07~~
- D. 1.7

$$P_{2016} = P_{2015} (1.07)$$
$$P_{2016} = k P_{2015}$$
$$k = 1.07 //$$

Question ID dd880033

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: dd880033

Which expression represents the result of increasing a positive quantity  $w$  by 43%?

- ~~A.  $1.43w$~~
- B.  $0.57w$
- C.  $43w$
- D.  $0.43w$

$1.43W //$

# Question ID c7c7d2e2

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: c7c7d2e2

There are 450 tiles in a box. Of these tiles, 6% are black. How many black tiles are in the box?

$$450(0.06) = 27 //$$

# Question ID d5770b24

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: d5770b24

432 is 96% of what number?

$$\begin{aligned} 432 &= 0.96x \\ x &= 450 // \end{aligned}$$

Question ID 73f95aef

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: 73f95aef

The population of Greenville increased by 7% from 2015 to 2016. If the 2016 population is  $k$  times the 2015 population, what is the value of  $k$ ?

- A. 0.07
- B. 0.7
- ~~C. 1.07~~
- D. 1.7

$$\begin{aligned} P_{2016} &= P_{2015} \cdot 1.07 \\ P_{2016} &= k \cdot P_{2015} \\ k &= 1.07 \end{aligned}$$

# Question ID 8426d0ec

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: 8426d0ec

Last year, Cedric had 35 plants in his garden. This year, the number of plants in Cedric's garden is 60% greater than the number of plants in his garden last year. How many plants does Cedric have in his garden this year?

$$35 (1.6) = 56 //$$

Question ID 52f5fe7b

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: 52f5fe7b

The table summarizes the number of objects in each group.

| Group | Number of objects |
|-------|-------------------|
| A     | <u>375</u>        |
| B     | 54                |
| C     | <u>690</u>        |
| D     | 81                |
| Total | 1,200             |

The number of objects in group C is  $p\%$  of the number of objects in group A. What is the value of  $p$ ?

$$690 = \frac{p}{100} \cdot 375$$
$$p = 184 //$$

# Question ID 22efbe91

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: 22efbe91



In a group, **40%** of the items are red. Of all the red items in the group, **30%** also have stripes. What percentage of the items in the group are red with stripes?

- A. **10%**
- B. **12%**
- C. **70%**
- D. **75%**

# Question ID 1a850131

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: 1a850131



The number of coins in a collection increased from **9** to **90**. What was the percent increase in the number of coins in this collection?

- A. 10%
- B. 81%
- C. 90%
- D. 900%

# Question ID e639a4f6

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: e639a4f6



The value of  $z$  is **1.13** times **100**. The value of  $z$  is what percent greater than **100**?

- A. **11.3**
- B. **13**
- C. **130**
- D. **213**

Question ID e8e05313

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: e8e05313

In March, the price of a collectible card was \$15.50. In April, the price of the collectible card was \$17.36. The price of the collectible card in April was  $p\%$  of the price of the collectible card in March. What is the value of  $p$ ?

- A. 12
- B. 88
- ~~C. 112~~
- D. 188

$$17.36 = \frac{p}{100} \times 15.50$$
$$p = 112 //$$

Question ID d9dc059a

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: d9dc059a

13 is  $p\%$  of 25. What is the value of  $p$ ?

$$13 = \frac{p}{100} \times 25$$
$$p = 52 //$$

Question ID d320f4c4

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: d320f4c4

An insurance company offers a series of three information sessions. 1,250 people attended the first information session. 72% of the people who attended the first information session attended the second information session, and 36% of the people who attended the first and second information sessions attended the third information session. How many people attended all three information sessions?

$$1,250 (0.72) (0.36) = 324 //$$

# Question ID fdf7a80a

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: fdf7a80a

What number is 40% greater than 115?

$$\begin{aligned} X &= 115(1.4) \\ &= 161 \end{aligned}$$

# Question ID a1c05998

| Assessment | Test | Domain                            | Skill       | Difficulty |
|------------|------|-----------------------------------|-------------|------------|
| SAT        | Math | Problem-Solving and Data Analysis | Percentages | Medium     |

ID: a1c05998

The amount of Hanna's bill for a food order was \$50. Hanna gave a tip of 20% of the amount of the bill. What is the amount, in dollars, of the tip Hanna gave?

$50(0.2) = 10 //$