

Date Completed: _____

Mentor Initials: _____

A mentor can change everything.



Percents (Basic)

Multiple Choice

1. There were 16 contestants in the first round of the state Geography Bee. In the first round, 2 contestants said the United Kingdom was part of the European Union and were eliminated. In the second round, 6 more said the capital of Austria was Canberra and were eliminated. By round 3, what percent of the original 16 contestants remained?
A) 20%
B) 30%
C) 40%
D) 50%
2. 25% of $\frac{1}{2}$ of a number n is 10. What is n ?
A) 5
B) 62.5
C) 80
D) 100
3. The ocean covers approximately 360 million square kilometers of the Earth's surface. The Earth's surface measures approximately 510 million square kilometers. What percentage of the Earth's surface is accounted for by land area (in millions of square kilometers)?
A) 15%
B) 29.4%
C) 70.5%
D) Cannot be determined from the given information.
4. Ella sells her paintings on Etsy. Listing an item costs \$.20, and Etsy collects 3.5% of the selling price when Ella makes a sale. If Ella charges \$30.00 for her paintings and sells 13, how much does Etsy make from Ella's sales?
A) \$11.75
B) \$13.65
C) \$16.25
D) \$27.30

5. What is 120 increased by 25%?
A) 145
B) 150
C) 155
D) 160

6. There are 50 marbles in a bag. 10 are red, 12 are blue, 15 are green, 6 are yellow, and 7 are orange. What percent of the marbles are either green or orange?
A) 10.5%
B) 21%
C) 40%
D) 44%

7. 120 is a 25% decrease from what number?
A) 145
B) 150
C) 155
D) 160

8. What is 20% of $\frac{1}{4}$ of 200?
A) 10
B) 20
C) 40
D) 60

9. Of the 40,248 students who applied to Harvard in 2020, 2,015 were admitted. What percent of students were admitted?
A) 4%
B) 5%
C) 6%
D) 7%

10. What is 310% of 1500?
A) 150
B) 465
C) 1965
D) 4650

Grid-In

11. What is 120 decreased by 25%?
12. 300 students at the local high school take the PSAT at school. Of the 300, 48% decide to take the SAT, and 52% take the ACT. Of the students that take the ACT, 75% take it a second time. How many students took the ACT a second time?
13. The number 260.6 is 27% of x . What is the value of x , rounded to the nearest whole number?
14. A surgeon finds that she can complete surgeries 25% faster with the help of a new surgical device. If the surgeon completed 4 surgeries per day before the device was implemented, how many more surgeries per work week (Monday-Friday) can the surgeon complete using the device?
15. 120 is a 25% increase from what number?