

NAME: _____

P.I. A.N.5: Solve algebraic problems arising from situations that involve fractions, decimals and percents

1. Which of the following can also be written as 84%?

[A] 0.16 [B] $\frac{21}{25}$ [C] 8.4 [D] $\frac{84}{25}$

2. All of the following are equal except:

[A] 50% of 400 [B] \$200
[C] \$400 decreased by half
[D] 150% of 50
[E] \$100 increased by 100%

3. Express the sample proportion as a percent.
379 out of 659 applicants for jobs had the necessary skills.

4. 20% of 60 is what number?

5. 80% of 50 is what number?

6. Compare the quantities in Column A and Column B.

Column A

Column B

80% of 72,000 20% of 288,000

- [A] The quantity in Column A is greater.
[B] The quantity in Column B is greater.
[C] The quantities are equal.
[D] The relationship cannot be determined from the information given.

7. 6 is 30% of what number?

[A] 0.2 [B] 500 [C] 20 [D] 1.8

8. 18 is 60% of what number?

[A] 333 [B] 10.8 [C] 30 [D] 0.3

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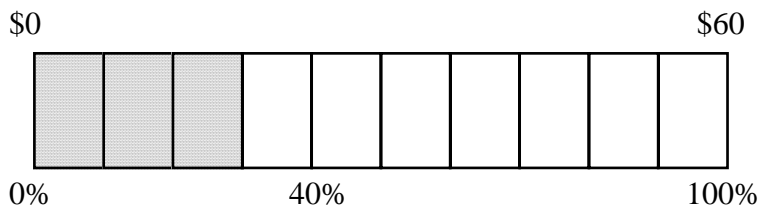
9. Choose the equation you would use to answer the question: What percent of 175 is 35?

[A] $35n = 175$ [B] $n = \frac{175}{35}$ [C] $175(35) = n$ [D] $175n = 35$ [E] $175 + 35 = n$

10. Write the sentence as an equation: 35 is what percent of 105?

[A] $x = 35\% \cdot 105$ [B] $35 = x \cdot 105$ [C] $105 = 35\% \cdot x$ [D] $35 = 105\% \cdot x$

11. Determine the amount represented by the model below.



[A] \$42 [B] \$0.30 [C] \$18 [D] \$6

[1] B

[2] D

[3] 57.5%

[4] 12

[5] 40

[6] C

[7] C

[8] C

[9] D

[10] B

[11] C