

Practice Problems 7

- Grace buys notebooks at a price of four for \$5 and sells them at a price of three for \$6. How many notebooks must she sell in order to make a profit of \$120?
A 40 **B** 60 **C** 100 **D** 150 **E** 160
- There are eight furlongs in a mile and two weeks in a fortnight. If I travel 2800 furlongs in a fortnight, how many miles per day, rounded to the nearest whole number, did I travel?
A 12 **B** 22 **C** 25 **D** 27 **E** 28
- There are three boys for every five girls in the chamber choir. Which of the following numbers is closest to the percentage of boys in the chamber choir?
A 32 **B** 34 **C** 36 **D** 38 **E** 40
- Paving stones are 6 inches long \times 4 inches wide \times 1 inch thick. How many paving stones will be required to pave a rectangular space which is 2 feet \times 3 feet?
A <25 **B** 25 to 30 **C** 31 to 35 **D** 36 to 40 **E** >40
- After each round of a "sudden death" tournament, the winners play each other and the losers are eliminated. If there are 64 teams in a tournament and they keep playing until only one team is left, there will be six rounds. How many games will be played?
A 11 **B** 18 **C** 32 **D** 63 **E** 64
- A yellow marble, a green marble, a red marble, a blue marble and a brown marble are dropped into an empty jar in the order given. The process is repeated until there are 88 marbles in the jar. How many of the marbles are red?
A 15 **B** 16 **C** 17 **D** 18 **E** 20
- Six trees are equally spaced along one side of a straight road. The distance between the first tree and the fourth tree is 60 feet. What is the distance, in feet, between the first tree and the last tree?
A 70 **B** 75 **C** 80 **D** 90 **E** 100
- Three people with different names line up single file. What is the probability that they are in alphabetical order from front to back?
A 1/2 **B** 1/3 **C** 1/6 **D** 1/9 **E** 1/16

9. If $A \$ B$ means the same thing as $A - 2B$, determine the value of $(3 \$ 2) \$ (4 \$ 1)$.

- A -11 B -5 C -3 D 3 E 8

10. In the following multiplication problem, A and B are different digits. What is B?

$$\begin{array}{r} AB \\ \times A \\ \hline 114 \end{array}$$

- A 0 or 1 B 2 or 3 C 4 or 5 D 6 or 7 E 8 or 9

11. Suppose you see a lightning flash and hear a thunder clap exactly 10 seconds later. The speed of sound is 1080 feet per second and there are 5280 feet in a mile. Estimate, to the nearest half mile, how many miles you are from the lightning flash. Assume the speed of light is infinite.

- A 2.0 B 2.5 C 3.0 D 3.5 E 4.0

12. If a tube of lipstick costs $\frac{3}{5}$ as much as a bottle of nail polish, how many lipsticks can be purchased for the price of 15 bottles of nail polish?

- A 5 B 15 C 21 D 25 E 30

13. To make five cups of lemonade you mix three cups of water with two cups of lemon juice. If there are sixteen cups in a gallon, how many cups of lemon juice are needed to make ten gallons of lemonade?

- A 16 B 32 C 40 D 48 E 64

14. How many whole numbers between 1 and 1991 are multiples of 5 and are even?

- A 199 B 200 C 398 D 399 E 400

15. How many groups of three different numbers which add up to 10 can be made using the set $\{1, 2, 3, 4, 5, 6\}$? The order doesn't matter.

- A 3 B 4 C 5 D 6 E 7

E C D D D	D E C B E	A D E A A
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