

Student Name: _____
Please write your name on *every* page.

4 Section D

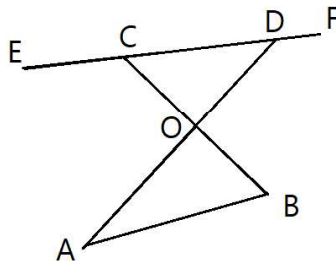
D1

A kilogram is 2.2 pounds. If someone weighs 190 pounds, how many kilograms do they weigh?

Answer to D1: _____

D2

In the diagram below, $\angle OAB = 30^\circ$ and $\angle OBA = 50^\circ$. What is the sum of $\angle OCE$ and $\angle ODF$?



Answer to D2: _____

D3

How many prime numbers are there less than 50?

Answer to D3: _____

D4

What is the value of $4 + \frac{1}{2 + \frac{1}{1 + \frac{1}{3}}}$?

Answer to D4: _____

Student Name: _____
Please write your name on *every* page.

D5

If the greatest common divisor of two numbers is 10 and their least common multiple is 100, what is the product of the two numbers?

Answer to D5: _____

D6

If four fair coins are tossed, what is the probability of getting an odd number of heads?

Answer to D6: _____

D7

How many numbers between 1 and 100 are multiples of 2 but not multiples of 3?

Answer to D7: _____

D8

Liam and Patrick are playing a game. Liam picks a number between 1 and 2023. Patrick then repeatedly attempts to guess Liam's number. After each guess, Liam tells Patrick whether the guess was too low, too high, or exactly his number (in this last case the game ends). What is the minimum number of guesses that Patrick has to make in order to guess Liam's number correctly regardless of which one he chose?

Answer to D8: _____