

Pi Mu Epsilon

Problem of the Month

March 2024

Find the smallest positive integer, x , such that

- when x is divided by 2, the remainder is 1, and
- when $2x$ is divided by 3, the remainder is 1, and
- when $3x$ is divided by 4, the remainder is 1, and
- when $4x$ is divided by 5, the remainder is 1, and
- when $5x$ is divided by 6, the remainder is 1, and
- when $6x$ is divided by 7, the remainder is 1, and
- when $7x$ is divided by 8, the remainder is 1.

Problem of the Month Rules:

- ⌘ Submissions must include a complete mathematical justification along with the answer.
- ⌘ Submissions may only be made by individuals or groups of two and must be dated.
- ⌘ Due date: March 27, 2024 before 5 p.m. to one of Drs. Poplin, Shoenthal, Ledford, or Hoehner.

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