## Pracovní list - třídy sítí, masky sítí, podsítě

Základní škola Nové Město na Moravě

Mějme počítač s IP adresou **119.56.252.26** a maskou **255.255.255.240**. Určete:

Třídu sítě, standartní masku sítě, počet podsítí, počet počítačů v každé podsíti, adresu sítě, adresu broadcastu.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **IP adresa** | | | 119.56.252.26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Maska sítě** | | | 255.255.255.240 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Třída sítě** | | | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Maska sítě binárně** | | | 1 | | 1 | | | | 1 | | | | | 1 | | | | | 1 | | | | 1 | | 1 | | | | | 1 | | | | | 1 | | | | | | 1 | | | | | | 1 | | | | 1 | | | | 1 | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | 1 | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | 1 | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | | | | | | | | | | | |
| **Standartní maska** | | | 255.0.0.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Standartní maska binárně** | | | 1 | | 1 | | | | 1 | | | | | 1 | | | | | 1 | | | | 1 | | 1 | | | | | 1 | | | | | 0 | | | | | | 0 | | | | | | 0 | | | | 0 | | | | 0 | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | 0 | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | 0 | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | | | | | | | | | | | |
| **Počet počítačů** | | | 24=16 16-2=14 Maximálně 14 počítačů v každé podsíti. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Počet podsítí** | | | 220=1 048 576 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Adresa sítě** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **IP adresa binárně** | | | 0 | | | | 1 | | | | | 1 | | | | 1 | | | | 0 | | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | | 0 | | | | | | | | 0 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 0 | | | | | | | 0 | | | | | 0 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 1 | | | 1 | | | 0 | | | 1 | | | 0 |
| **Maska binárně** | | | 1 | | | | 1 | | | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | | 1 | | | | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 |
| **Logický součin** | | | 0 | | | | 1 | | | | | 1 | | | | 1 | | | | 0 | | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | | 0 | | | | | | | | 0 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 0 | | | | | | | 0 | | | | | 0 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 1 | | | 0 | | | 0 | | | 0 | | | 0 |
| **IP adresa sítě binárně** | | 119 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 252 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Adresa broadcastu** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **IP adresa** | | 0 | | | | 1 | | | | | 1 | | | | | | 1 | | | | | 0 | | | | | | 1 | | | | | 1 | | | | 1 | | | | | | 0 | | | | | | 0 | | | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 0 | | | | | 0 | | | | | | | 0 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | 1 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 1 | | | 1 | | | 0 | | | 1 | | | 0 | |
| **Negovaná maska podsítě** | | 0 | | | | 0 | | | | | 0 | | | | | | 0 | | | | | 0 | | | | | | 0 | | | | | 0 | | | | 0 | | | | | | 0 | | | | | | 0 | | | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | 1 | | | 1 | | | 1 | | | 1 | |
| **Logický součet** | | 0 | | | | 1 | | | | | 1 | | | | | | 1 | | | | | 0 | | | | | | 1 | | | | | 1 | | | | 1 | | | | | | 0 | | | | | | 0 | | | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 0 | | | | | 0 | | | | | | | 0 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | | 1 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 1 | | | 1 | | | 1 | | | 1 | | | 1 | |
| **IP adresa broadcastu** | | 119 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 252 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **IP adresa** | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Maska sítě** | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Třída sítě** | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Maska sítě binárně** | |  | |  | | | |  | | | | |  | | | | |  | | | |  | |  | | | | |  | | | | |  | | | | | |  | | | | | |  | | | |  | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | |  | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | |  | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | | | | | | | | | | | |
| **Standartní maska** | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Standartní maska binárně** | |  | |  | | | |  | | | | |  | | | | |  | | | |  | |  | | | | |  | | | | |  | | | | | |  | | | | | |  | | | |  | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | |  | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | |  | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | | | | | | | | | | | |
| **Počet počítačů** | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Počet podsítí** | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Adresa sítě** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **IP adresa binárně** |  | | | | |  | | | |  | | | | |  | | | | | |  | | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | |  | | |  | | |  | | |  |
| **Maska binárně** |  | | | | |  | | | |  | | | | |  | | | | | |  | | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | |  | | |  | | |  | | |  |
| **Logický součin** |  | | | | |  | | | |  | | | | |  | | | | | |  | | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | |  | | |  | | |  | | |  |
| **IP adresa sítě binárně** |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Adresa broadcastu** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **IP adresa** |  | | | | |  | | | |  | | | | |  | | | | | |  | | | | | |  | | | | |  | | | |  | | | | | |  | | | | | |  | | | | | |  | | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | |  | | |  | | |  | | |  | | |
| **Negovaná maska podsítě** |  | | | | |  | | | |  | | | | |  | | | | | |  | | | | | |  | | | | |  | | | |  | | | | | |  | | | | | |  | | | | | |  | | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | |  | | |  | | |  | | |  | | |
| **Logický součet** |  | | | | |  | | | |  | | | | |  | | | | | |  | | | | | |  | | | | |  | | | |  | | | | | |  | | | | | |  | | | | | |  | | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | | | |  | | |  | | |  | | |  | | |  | | |
| **IP adresa broadcastu** |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |