

1. Fill the missing numbers:

$$\begin{array}{r} \times 27 \\ ** \\ \hline **8 \\ + ** \\ \hline 3**; \end{array} \quad \begin{array}{r} \times 126 \\ ** \\ \hline *** \\ + **** \\ \hline 1*2*6; \end{array}$$

2. A pool can be filled by the first pipe in 5 hours, by the second pipe in 6 hours, and by the third pipe in 8 hours. However, water from the fully filled pool can be drained in 10 hours. At 8 am, all three pipes were opened. After 2 hours, the second pipe was turned off, and 30 minutes later, the third pipe was turned off. At what time will the pool be completely filled?
3. x,y,k are three distinct digits. If we add all six three-digit numbers that can be written using these digits without repeating any digit within a number, we get 5328. Find these digits.
4. How many 0 are at the end of the number

$$1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9 \cdot 10 \cdot 11 \cdot 12 \cdot 13 \cdot 14 \cdot 15$$

5. Seawater contains 5% salt. How many kilograms of fresh water must be added to 20 kg of seawater so that the salt content in the final mixture is 2%?
6. How can you cut off 21 m from a rope that is 32 m long without using any measuring devices?

7. Evaluate:

$$3) 5\frac{9}{14} - 3\frac{3}{14} : \left(1\frac{31}{35} + \frac{29}{30} + 1\frac{11}{42}\right) \cdot 4;$$

$$4) \frac{5}{8} - \frac{3}{8} : \left(\frac{1}{16} + \frac{11}{36} + \frac{5}{48} + \frac{5}{18}\right) \cdot \frac{2}{3};$$

$$5) \left(8\frac{7}{12} - 2\frac{17}{36}\right) \cdot 2,7 - 4\frac{1}{3} : 0,65;$$

$$6) \left(1\frac{11}{24} + \frac{13}{36}\right) \cdot 1,44 - \frac{8}{15} \cdot 0,5625.$$