

1. Calculate:

a) $\frac{1}{8} + \frac{3}{4}$

b) $\frac{2}{5} + \frac{3}{8}$

c) $\frac{5}{12} - \frac{1}{4}$

2. Solve the following equations:

$2x - 4 = x + 8$	$\frac{1}{2} + y = 3$	$z - \frac{1}{3} = \frac{2}{3}$
$120 - 7x = 57$	$(y + 7) \cdot 9 = 117$	$\frac{6}{14} \div x = \frac{1}{7}$
$x \div \frac{1}{3} = \frac{3}{5}$	$18 \div x = 108$	$\frac{1}{5}x = \frac{2}{5}$

- 3.** I got 34 binders and 40 loose leaf paper sets. What is the **greatest** number of students to whom I can distribute evenly the binders and paper sets?

4. An apple worm was eating an apple. On the first day, it ate a half of the apple, on the second day it ate a half of the rest, and on the third day it ate a half of the remaining apple again. On the fourth day, it ate whatever was left of the apple. What part of the apple did it eat on the fourth day?



5. Find missing numbers so that you get equivalent fractions: Here is YouTube video explaining equivalent fractions if you need a reminder
<https://www.youtube.com/watch?v=GMGxG8inf6E>

a) $\frac{\quad}{6} = \frac{7}{21} = \frac{21}{\quad} = \frac{\quad}{18}$

b) $\frac{2}{\quad} = \frac{\quad}{15} = \frac{20}{100} = \frac{\quad}{35}$

c) $\frac{5}{\quad} = \frac{\quad}{12} = \frac{55}{\quad} = \frac{30}{60}$

6. Prove that among any 3 natural numbers there are always 2 numbers sum of which is even number.

7. Find the length of a segment AB if:

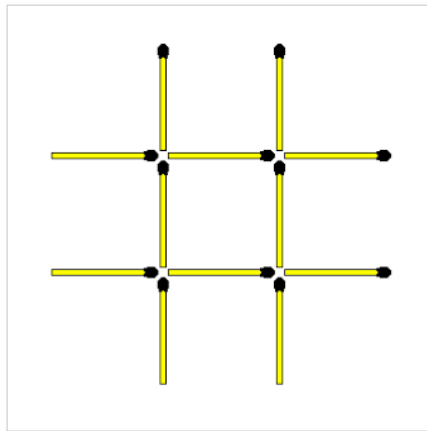
a. $\frac{2}{5}$ of its length is equal to 3 cm

b. $\frac{3}{4}$ of its length is equal to 13 m

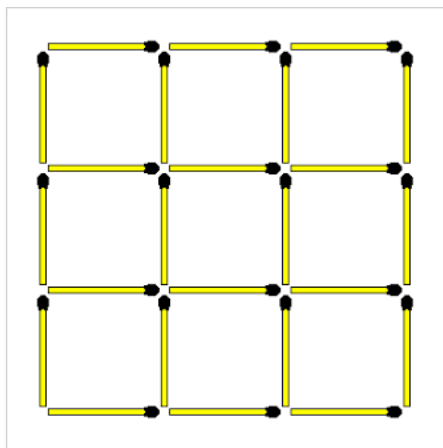
c. 8 cm is $\frac{5}{7}$ of its length

d. 10 cm is $\frac{3}{10}$ of its length

8. Move 3 sticks to create 3 squares. All squares must be equal in size.



9. Remove 4 matchsticks to leave only 5 squares, ALL EQUAL IN SIZE



10. Remove parenthesis: $7(3t - 5 + 4g) =$