

**Complete in this handout:**

1. Members of a family decided to invest into their kids' college fund. Each month mom contributes \$200. Dad decided to beat her contribution and contributes \$250 a month. Grandma decided to contribute even more and puts in \$350 each month. Grandpa wants to be the most generous and contributes \$400 each month. How long will it take to accumulate \$60,000 in the college fund?

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2. Each noon East and West Camps located 30 km apart send messengers to each other.. This time the messenger from the East Camp can run 9 km/h, while the messenger from the West Camp can run 15 km/h.

I. How long will it take the messenger from the ...

a). ... East Camp to reach the West Camp?

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b). ... West Camp to reach the East Camp?

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II. When will the two messengers meet?

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III. How far from the East Camp will the messengers meet?

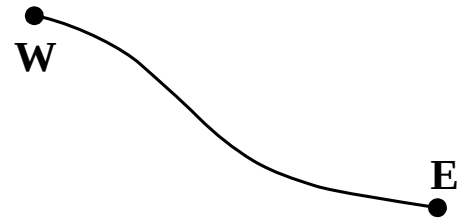
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3. Present as decimal fractions:

$$\frac{1}{10} + \frac{4}{100} + \frac{2}{1000} =$$

$$3 + \frac{2}{10} + \frac{4}{100} + \frac{5}{1000} =$$

$$3 + \frac{2}{10} + \frac{5}{1000} =$$



4. A boat moves 18 km/h in a lake. How long will it take to cover ...

a). ... 63 km in still water?

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b). ... 48 km when it moves down a river flowing 6 km/h?

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c). ... to come back the same 48 km when moving upstream?

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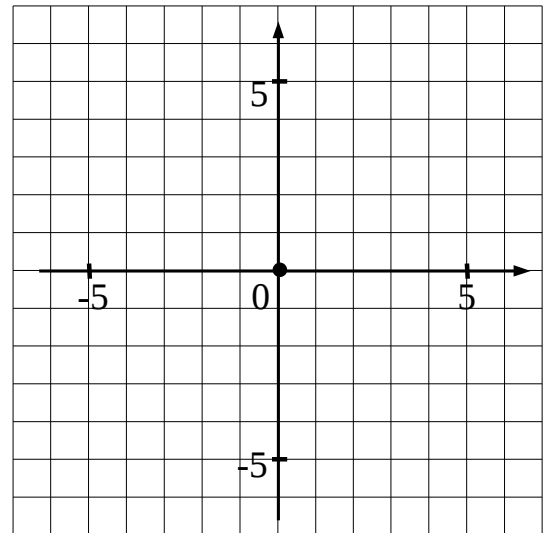


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5. Plot vectors  $\vec{e}=(3,2)$  ,  $\vec{g}=(-1,3)$  ,  
and  $\vec{x}=(0,-3)$  .

$$\vec{e}+\vec{g} = ( \quad , \quad ) \quad \vec{e}+\vec{x} = ( \quad , \quad )$$

$$\vec{x}+\vec{g} = ( \quad , \quad ) \quad \vec{e}+\vec{e} = ( \quad , \quad )$$



**Complete in your notebook:**

6. Calculate:

a)  $\frac{\frac{1}{2} + \frac{1}{3}}{\frac{1}{2} - \frac{1}{3}} =$

b)  $\frac{\frac{1}{2} - \frac{1}{3}}{1 - \frac{3}{4}} =$

c)  $\frac{1 - \frac{7}{12}}{\frac{1}{2} + \frac{1}{4}} =$

(Answers: 1 – 50 months, 2a – 3 h 20 min, 2b – 2 h, 2-II – 1:15 PM, 2-III – 11¼ km,  
4a – 3 h 30 min, 4b – 2 h, 4c – 4 h; 6a – 5, 6b – 2/3, 6c – 5/9)