

**Complete in this handout**

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

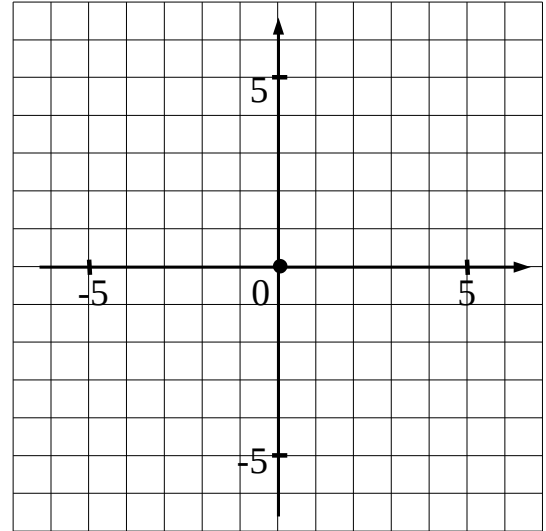
Find and plot vectors ...

...  $\vec{g}+\vec{m} = ( \quad , \quad )$

...  $\vec{x}-\vec{g} = ( \quad , \quad )$

...  $\vec{x}+2\vec{m} = ( \quad , \quad )$

...  $2\vec{x}+\vec{m} = ( \quad , \quad )$



2. A pipe can drain a swim pool in 6 hours. The pool is  $\frac{4}{5}$  full of water. How many hours and minutes will it take to drain it?

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3. Solve the word problems.

a). A tape transporter moves 3 km/h. How fast can it move 250 m ( $\frac{1}{4}$  km)?

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b). A man can walk 6 km/h. How long will it take him to walk 250 m?

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c). How fast can the man walk 250 m on the transporter?

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**Complete in your notebook:**

4. Calculate:  $\frac{\frac{3}{4} - \frac{1}{8}}{\frac{1}{4} + \frac{3}{16}} - \frac{3}{7} =$

5. Show that ...

a). ...  $(\frac{2}{3}x + 1) : \frac{1}{6} - 3 \cdot (x + 2) = x$

b). ...  $(2x - 1) \cdot \frac{1}{4} + (4x + 1) : 8 + \frac{1}{8} = x$

6. Solve the equations:

a).  $12 - \frac{5}{6}x = 7$

b).  $2 + \frac{2}{3}x = \frac{1}{6}x + 4$

c).  $12 - \frac{6}{x} = 4$

**Answers:**

2 – 4h 48 min

3a – 5 min

3b – 2 min 30 sec

3c – 100 sec

4 – 1

6a:  $x = 6$

6b:  $x = 4$

6c:  $x = \frac{3}{4}$