

1) Given three vectors $\vec{x} = (-1, 3)$, $\vec{y} = (3, 2)$, and $\vec{z} = (2, -1)$ calculate the coordinates of the following vectors:

$$\frac{1}{2}\vec{x} = (\quad , \quad)$$

$$-3\vec{y} = (\quad , \quad)$$

$$1\frac{2}{3}\vec{z} = (\quad , \quad)$$

$$2\vec{x} - \vec{z} = (\quad , \quad)$$

$$\vec{z} + \frac{1}{2}\vec{x} = (\quad , \quad)$$

$$1\frac{1}{2}\vec{x} + \frac{1}{2}\vec{y} = (\quad , \quad)$$

2) Solve the following equations

a) $|3x| = 9$

d) $|v + 8| - 5 = 2$

b) $|-4 + 5x| = 16$

e) $6 \times |1 - 5x| - 9 = 57$

c) $\frac{|7p+4|}{8} = 3$

f) $|-6m| = 30$

3) At a restaurant, a grilled Hot Dog costs \$4.00. This includes the 10% sales tax. What is the price before tax?

4) After a 25% discount, a music cd cost \$10. What was the original, retail price?

5) Using a compass and straight edge, construct at least two parallel lines.

As always, feel free to be creative with this problem!