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| **Fill in the Blanks** | **Dividing a Line in a Ratio** |

Point C divides the line segment AB in the given ratio.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Point A** | **Point B** | **AC : CB** | **Point C** | **Midpoint of AB** |
| $$(0, 0)$$ | $$(3, 6)$$ | $$2 :1$$ |  | $$(1.5, 3)$$ |
| $$(1, 1)$$ | $$(7, 4)$$ | $$1 :2$$ |  |  |
| $$(10, 5)$$ | $$(0, 0)$$ | $$4 :1$$ |  |  |
| $$(0, 0)$$ | $$(10, 5)$$ | $$2 :3$$ |  |  |
| $$(-1, 0)$$ | $$(11, 8)$$ | $$3 :1$$ |  |  |
| $$(4, 7)$$ | $$(8,-5) $$ | $$1 :3$$ |  |  |
| $$(2.3, -5.1)$$ | $$(4.8, 2.4)$$ | $$3 : 2$$ |  |  |
| $$(9, 0)$$ | $$(-5, -7)$$ | $$5 :2$$ |  |  |
| $$(0, 0)$$ |  | $$3 :1$$ |  | $$(2, 4)$$ |
|  | $$(5, 2)$$ | $$1 :2$$ |  | $$(3.5, 0.5)$$ |
| $$(-1, 6)$$ |  | $$3 :2$$ | $$(5, 3)$$ |  |
| $$(11, -5)$$ | $$(-3, 2)$$ |  | $$(5, -2)$$ |  |
| $$(0, 2a)$$ |  | $$2 : 1$$ | $(-4a, 4a)$  |  |
| $$\left(-\frac{9}{10}, \frac{2}{3}\right)$$ | $$\left(\frac{1}{2}, 5\frac{1}{3}\right)$$ |  | $$\left(-\frac{1}{10}, \frac{10}{3}\right)$$ |  |
|  |  | $$2 :1$$ | $$(6, -3)$$ | $$(4, -2)$$ |
|  |  | $$2 :5$$ | $$\left(\frac{11b}{14}, -2b\right)$$ | $$(b, b)$$ |