


## Internet Service

Aliant charges a monthly fee of \$20.00, and an additional \$2.00 per hour.  
 Sprint charges a monthly fee of \$10.00, and an additional \$4.00 per hour.

Aliant

$m = 2$   
 $b = 20$   
 $x = \# \text{ of hours}$   
 $y = \$$   
 $y = mx + b$   
 $y = 2x + 20 = \$30.00$



Point of Intersection

$(x, y)$   
 $(5, 30)$

$2x + 20 = 4x + 10$   
 $2x - 4x = 10 - 20$   
 $-2x = -10$   
 $\frac{-2x}{-2} = \frac{-10}{-2}$   
 $x = 5 \text{ Hours}$

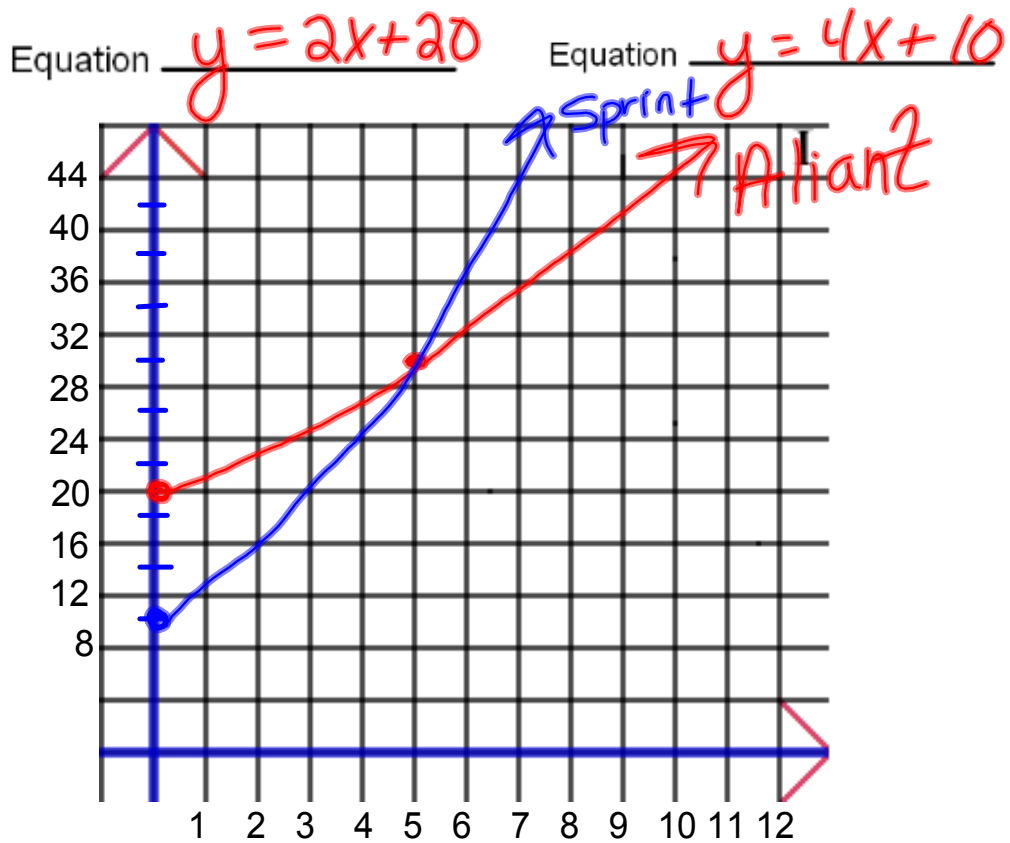
Sprint

$m = 4$   
 $b = 10$   
 $x = \# \text{ of hrs}$   
 $y = \$ \text{ Cost}$   
 $y = mx + b$   
 $y = 4x + 10 = \$30.00$

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Aliant

Sprint



1. At what point would the two companies cost the same?
2. Which Company should Sally choose if she uses the internet for about 40 hours a month? **Aliant is cheaper**

