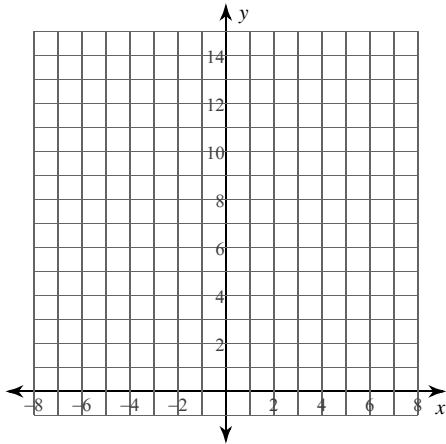


## Calculus Practice: Riemann Sums 4a

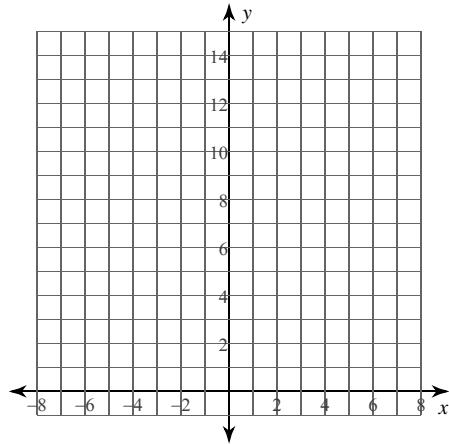
For each problem, approximate the area under the curve over the given interval using 4 trapezoids. You may use the provided graph to sketch the curve and trapezoids.

1)  $y = -\frac{x}{2} + 4$ ;  $[2, 4]$



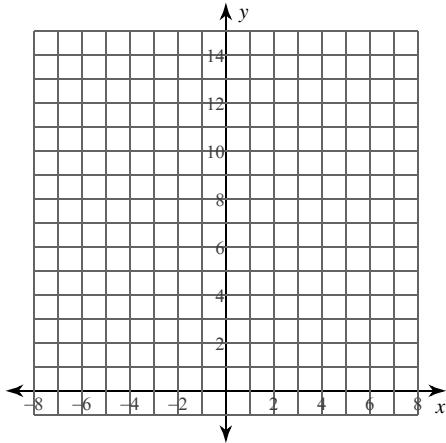
- A)  $\frac{11}{2} = 5.5$       B) 5  
 C)  $\frac{9}{2} = 4.5$       D)  $\frac{14}{3} \approx 4.667$

2)  $y = -\frac{x}{2} + 6$ ;  $[2, 4]$



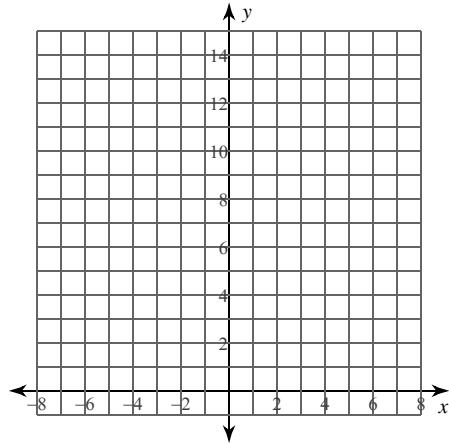
- A) 27      B) 18  
 C) 9      D) 11

3)  $y = x^2 + 2x + 3$ ;  $[-2, 0]$



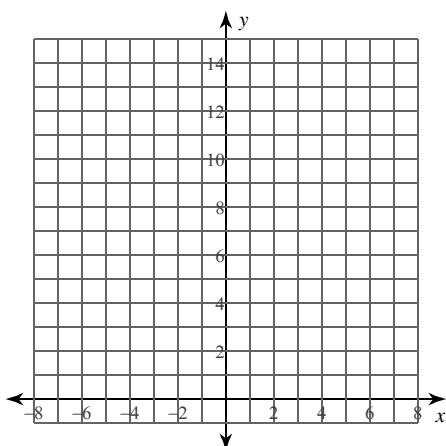
- A)  $\frac{21}{4} = 5.25$       B)  $\frac{27}{4} = 6.75$   
 C)  $\frac{57}{4} = 14.25$       D)  $\frac{19}{4} = 4.75$

4)  $y = -x^2 + 2x + 11$ ;  $[-1, 1]$



- A)  $\frac{85}{2} = 42.5$       B)  $\frac{77}{4} = 19.25$   
 C)  $\frac{255}{4} = 63.75$       D)  $\frac{85}{4} = 21.25$

5)  $y = -\frac{x^2}{2} - x + 5$ ;  $[-1, 1]$



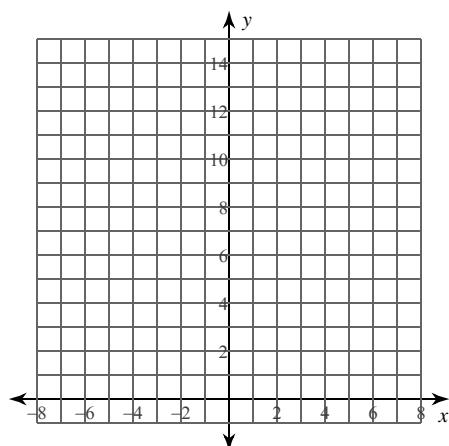
A)  $\frac{93}{8} = 11.625$

B)  $\frac{81}{8} = 10.125$

C)  $\frac{77}{8} = 9.625$

D)  $\frac{69}{8} = 8.625$

6)  $y = \frac{3}{x}$ ;  $[1, 3]$



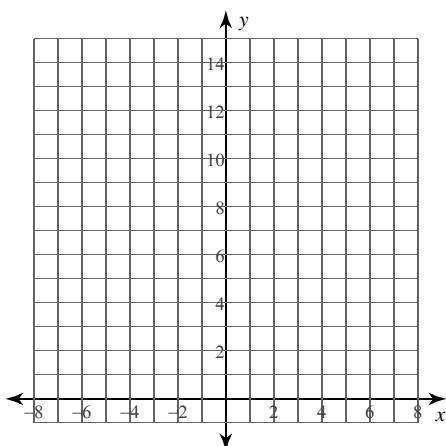
A)  $\frac{77}{20} = 3.85$

C)  $\frac{87}{20} = 4.35$

B)  $\frac{67}{20} = 3.35$

D)  $\frac{181}{60} \approx 3.017$

7)  $y = -\frac{2}{x}$ ;  $[-4, -2]$



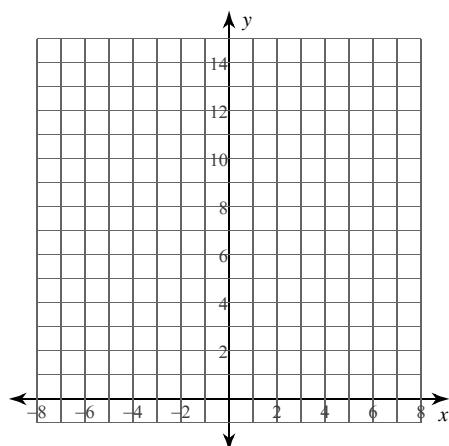
A)  $\frac{509}{840} \approx 0.606$

B)  $\frac{751}{840} \approx 0.894$

C)  $\frac{1171}{280} \approx 4.182$

D)  $\frac{1171}{840} \approx 1.394$

8)  $y = -\frac{1}{x}$ ;  $[-5, -1]$



A)  $\frac{101}{60} \approx 1.683$

B)  $\frac{101}{30} \approx 3.367$

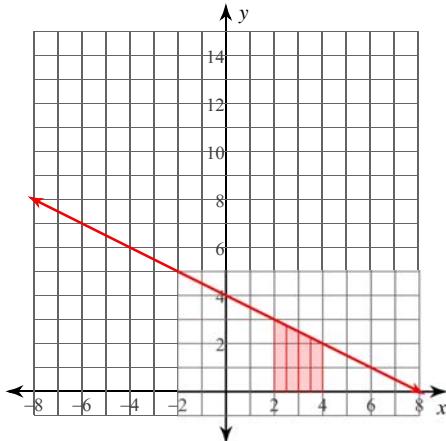
C)  $\frac{121}{60} \approx 2.017$

D)  $\frac{161}{60} \approx 2.683$

## Calculus Practice: Riemann Sums 4a

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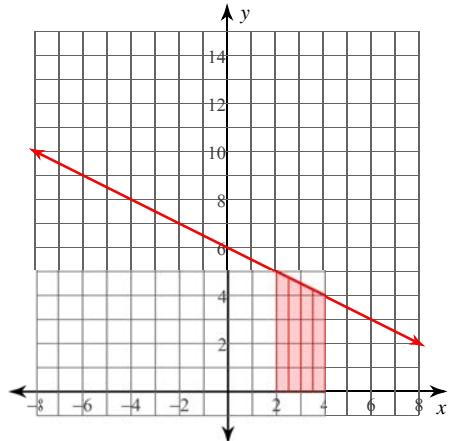
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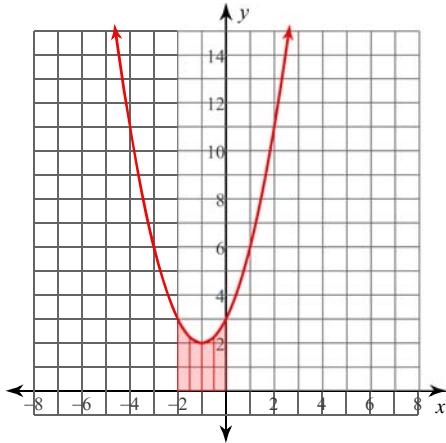
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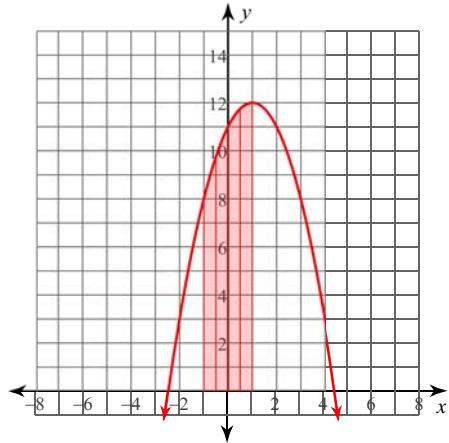
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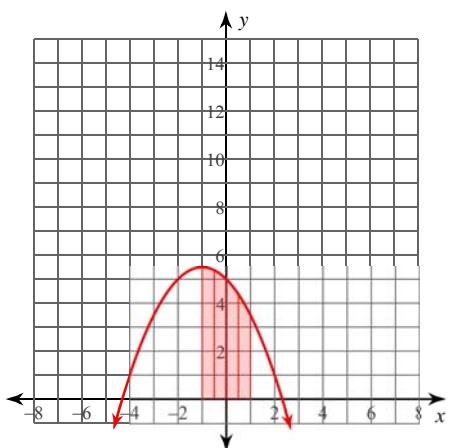
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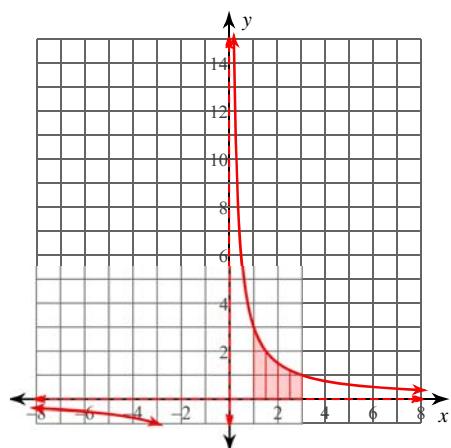
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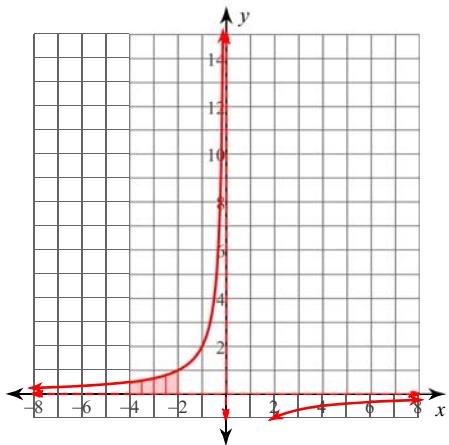
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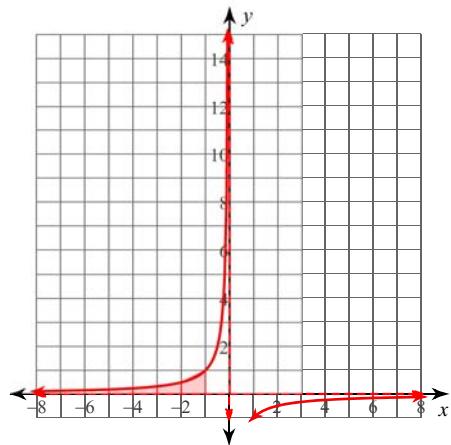
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