

TeX code compiled with `\documentclass{beamer}` using the Amsterdam theme.
There is one png image needed to compile slides:

[51graph.png](#)

```
\begin{document} \begin{frame} For each of the two regions described below, sketch the region
enclosed by the given curves. Decide whether to integrate with respect to x or y. Draw a typical
approximating rectangle and label its height and width. Then find the area. \vskip 10pt $$y = 2x +
3\quad y = 13 - x^2\quad x = -1\quad x = 2$$ \vskip 35pt $$x = 45 - 5y^2\quad x = 5y^2 - 45$$
\end{frame} \begin{frame} Sketch the region enclosed by the given curves. Then find the area.
\begin{enumerate}[a)] \item $$x = 6y^2\quad x = 4 + 5y^2$$ \item $$y = 6 \cos(\pi x)\quad y =
12x^2 - 3$$ \pause \item $$y = 4 \cos(6x)\quad y = 4 \sin(12x)\quad x = 0\quad x = \pi/12$$ \item
$$y = \sqrt{x} \quad y = \frac{1}{2}x\quad x = 25$$ \pause \item $$y = |3x|\quad y = x^2 - 4$$
\end{enumerate} \end{frame} \begin{frame} Two cars, A and B, start side by side and accelerate from
rest. The graphs of their velocity functions are given below. \begin{figure}[h]\centering{
\includegraphics[height=1.7in]{51graph.png}} \end{figure} \begin{enumerate}[a)] \item Which car is
ahead at time $a$? Explain. \item Interpret the area of the shaded region in physical terms. \item Which
car is ahead after $1.5a$ minutes? Explain. \end{enumerate} \end{frame} \begin{frame} Find the
number $b$ such that the line $y = b$ divides the region bounded by the curves $y = 4x^2$ and $y =
16$ into two regions with equal area. \end{frame} \end{document}
```

From:

<http://www2.math.binghamton.edu/> - **Department of Mathematics and Statistics, Binghamton University**

Permanent link:

http://www2.math.binghamton.edu/p/calculus/resources/calculus_flipped_resources/applications/5.1_area_tex 

Last update: **2015/08/29 03:35**