

Worksheet 1 – Solids of Revolution – Attempt 2

Name:

Set up but DO NOT evaluate the integral for the following:

1. $y = x^3$, $x = 1$, $x = 8$, $y = 1$

- (a) about the x-axis
- (b) about the y-axis
- (c) about $x = -1$
- (d) about $y = 30$

2. $y = x^{1/2}$, $x = 4$, $x = 16$, $y = 0$

- (a) about the x-axis
- (b) about the y-axis
- (c) about $x = 1$
- (d) about $x = -1$
- (e) about $y = 5$
- (f) about $y = -2$

3. $y = x$, $x = -1$, $x = -4$, $y = 0$

- (a) about the x-axis
- (b) about the y-axis
- (c) about $x = 1$
- (d) about $x = -1$
- (e) about $y = 2$
- (f) about $y = -5$

4. $y = x^2$, $x = 0$, $x = 2$, $y = 0$

- (a) about the x-axis
- (b) about the y-axis
- (c) about $x = 4$
- (d) about $x = -2$
- (e) about $y = -2$
- (f) about $y = 5$

5. $y = e^x$, $x = 1$, $x = 8$, $y = 0$

- (a) about the x -axis
- (b) about the y -axis
- (c) about $x = 10$
- (d) about $y = 4$
- (e) about $x = -1$