WebAssign
Hw 16 (7.8): Improper Integrals (Homework)

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MA 162 Spring 2012, section 321, Spring 2012
Instructor: Jonathan Montano

Current Score : 20 / 20 **Due :** Tuesday, February 21 2012 11:55 PM EST

1. 2/2 points | Previous Answers SCalcET7 7.8.007.

Determine whether the integral is convergent or divergent.

$$\int_{-\infty}^{0} \frac{1}{3 - 8x}\,dx$$

- convergent
- divergent ✓

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

✓

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2. 2/2 points | Previous Answers SCalcET7 7.8.009.

Determine whether the integral is convergent or divergent.

$$\int_{2}^{\infty} e^{-8p}\,dp$$

- convergent ✓
- divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

✓

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3. 2/2 points | Previous Answers SCalcET7 7.8.013.

Determine whether the integral is convergent or divergent.

$$\int_{-\infty}^{\infty} 19xe^{-x^2}\,dx$$

- (•) convergent
- ( ) divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

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4. 2/2 points | Previous Answers SCalcET7 7.8.014.MI.

Determine whether the integral is convergent or divergent.

$$\int_{1}^{\infty} 13\,\frac{e^{-\sqrt{x}}}{\sqrt{x}}\,dx$$

- (•) convergent
- ( ) divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

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5. 2/2 points | Previous Answers SCalcET7 7.8.016.

Determine whether the integral is convergent or divergent.

$$\int_{-\infty}^{\infty} 29\cos \pi t\,dt$$

- ( ) convergent
- (•) divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

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6. 2/2 points | Previous Answers SCalcET7 7.8.018.

Determine whether the integral is convergent or divergent.

$$\int_2^{\infty} \frac{dv}{v^2 + 5v - 6}$$

- (•) convergent
- ( ) divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

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7. 2/2 points | Previous Answers SCalcET7 7.8.021.

Determine whether the integral is convergent or divergent.

$$\int_1^{\infty} 89 \frac{\ln x}{x}\, dx$$

- ( ) convergent
- (•) divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

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8. 2/2 points | Previous Answers SCalcET7 7.8.027.MI.

Determine whether the integral is convergent or divergent.

$$\int_0^1 \frac{81}{x^5}\, dx$$

- ○ convergent
- ◉ divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

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9. 2/2 points | Previous Answers SCalcET7 7.8.028.

Determine whether the integral is convergent or divergent.

$$\int_2^3 \frac{13}{\sqrt{3-x}}\,dx$$

- ◉ convergent
- ○ divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

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10. 2/2 points | Previous Answers SCalcET7 7.8.031.

Determine whether the integral is convergent or divergent.

$$\int_{-2}^3 \frac{4}{x^4}\,dx$$

- ○ convergent
- ◉ divergent

If it is convergent, evaluate it. (If the quantity diverges, enter DIVERGES.)

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