WebAssign
Hw 25 (11.6, 11.7): Abs. Conv. & General Strategy (Homework)

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MA 162 Spring 2012, section 321, Spring 2012
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Current Score : 20 / 20 **Due :** Tuesday, March 27 2012 11:55 PM EDT

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1. 1.81/1.81 points | Previous Answers SCalcET7 11.6.023.

Determine whether the series is absolutely convergent, conditionally convergent, or divergent.

$$\sum_{n=4}^{\infty} 2\left(1+\frac{1}{n}\right)^{n^2}$$

- ○ absolutely convergent
- ○ conditionally convergent
- ◉ divergent ✓

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2. 1.81/1.81 points | Previous Answers SCalcET7 11.7.001.

Test the series for convergence or divergence.

$$\sum_{n=1}^{\infty} \frac{1}{n+9^n}$$

- ◉ convergent ✓
- ○ divergent

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3. 1.81/1.81 points | Previous Answers SCalcET7 11.7.002.

Test the series for convergence or divergence.

$$\sum_{n=1}^{\infty} \frac{(7n+1)^n}{n^{7n}}$$

- ◉ convergent ✓
- ○ divergent

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4. 1.81/1.81 points | Previous Answers SCalcET7 11.7.003.

Test the series for convergence or divergence.

$$\sum_{n=1}^{\infty} (-1)^n \frac{8n}{n+5}$$

- convergent
- divergent ✓

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5. 1.81/1.81 points | Previous Answers SCalcET7 11.7.005.

Test the series for convergence or divergence.

$$\sum_{n=1}^{\infty} \frac{n^2 5^{n-1}}{(-7)^n}$$

- convergent ✓
- divergent

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6. 1.81/1.81 points | Previous Answers SCalcET7 11.7.006.

Test the series for convergence or divergence.

$$\sum_{n=1}^{\infty} \frac{1}{2n+1}$$

- convergent
- divergent ✓

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7. 1.81/1.81 points | Previous Answers SCalcET7 11.7.007.

Test the series for convergence or divergence.

$$\sum_{n=6}^{\infty} \frac{1}{n\sqrt{\ln 4n}}$$

- convergent
- divergent ✓

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8. 1.81/1.81 points | Previous Answers SCalcET7 11.7.008.

Test the series for convergence or divergence.

$$\sum_{k=1}^{\infty} \frac{3^k k!}{(k+2)!}$$

- convergent
- divergent ✓

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9. 1.81/1.81 points | Previous Answers SCalcET7 11.7.009.

Test the series for convergence or divergence.

$$\sum_{k=1}^{\infty} k^3 e^{-3k}$$

- convergent ✓
- divergent

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10. 1.81/1.81 points | Previous Answers SCalcET7 11.7.023.

Test the series for convergence or divergence.

$$\sum_{n=1}^{\infty} \tan\left(\frac{4}{n}\right)$$

- ○ convergent
- ◉ divergent ✓

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11. 1.9/1.9 points | Previous Answers SCalcET7 11.7.025.

Test the series for convergence or divergence.

$$\sum_{n=1}^{\infty} \frac{3n!}{e^{n^2}}$$

- ◉ convergent ✓
- ○ divergent

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