وزارة التربية والتعليم و التعليم الفنى
الإدارة المركزية للتعليم العام
إدارة تنمية مادة الرياضيات

برعاية معالي وزير التربية والتعليم و التعليم الفنى
السيد الأستاذ/ محمد عبد اللطيف

وتوجيهات رئيس الإدارة المركزية للتعليم العام

د/ هالة عبد السلام خفاجى

إشراف علمي

مستشار الرياضيات

أ/ منال عزقول

أداءات وتقييمات لمنهج الرياضيات البحتة لغات

للصف الثانى الثانوي "علمى"

الفصل الدراسى الأول

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الأسبوع الثامن

لجنة الإعداد

د/ محمد عبد العاطى أ/ محمد الفار أ/ عفاف جاد

ترجمة

أ/ عمرو فاروق

مراجعة الترجمة

أ/ شريف البرهامى

Algebra: Exercises on Solving Absolute Value Inequalitys

1) Find in R the solution set of the following inequality:

$$|4x-2|-3x+1<0$$

Sol.: .....

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2) Find in R the solution set of the following inequality:

$$x|x+1|>12$$

Sol.: .....

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3) Find in R the solution set of the following inequality:

$$|x+5|<4$$

Sol.: .....

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4) Find in R the solution set of the following inequality:

$$|2x+4|>8$$

Sol.: .....

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5) Find in R the solution set of the following inequality:

$$\sqrt{x^2-12x+36}\leq 5$$

Sol.: .....

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Calculus: Limit of a function at infinity

6) Find: $\lim\limits_{x\to\infty}(7x^2+4x+1)$

Sol.: .....

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7) Find: $\lim\limits_{x\to\infty}\dfrac{3x^{-3}+8x^{-2}-10}{2x^{-3}+4x^{-2}+5}$

Sol.: .....

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8) Find: $\lim\limits_{x\to\infty}\dfrac{6x^4+4x^2-3}{5x^5+x-1}$

Sol.: .....

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9) Find: $\lim\limits_{x\to\infty}\dfrac{8x^4+7x-6}{4x^4+3}$

Sol.: .....

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10) Find: $\lim\limits_{x\to\infty}\dfrac{\sqrt{4x^2+1}}{4x-3}$

Sol.: .....

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Algebra: Exercises on Solving Absolute Value Inequalitys

1) Find in R the solution set of the following inequality:

$$|3x-2|-2x-1<0$$

Sol.: .....

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2) Find in R the solution set of the following inequality:

$$x|x-1|>6$$

Sol.: .....

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3) Find in R the solution set of the following inequality:

$$|x-2|<3$$

Sol.: .....

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4) Find in R the solution set of the following inequality:

$$|2x+5|>3$$

Sol.: .....

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5) Find in R the solution set of the following inequality:

$$\sqrt{x^2+10x+25}\leq 9$$

Sol.: .....

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Calculus: Limit of a function at infinity

6) Find: $\lim\limits_{x\to\infty}(3x^2+5x+2)$

Sol.: .....

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7) Find: $\lim\limits_{x\to\infty}\dfrac{7x^{-3}+9x^{-2}-12}{8x^{-3}+2x^{-2}+3}$

Sol.: .....

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8) Find: $\lim\limits_{x\to\infty}\dfrac{8x^4+2x^2-7}{2x^5+x-2}$

Sol.: .....

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9) Find: $\lim\limits_{x\to\infty}\dfrac{5x^4+2x-1}{6x^4+13}$

Sol.: .....

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10) Find: $\lim\limits_{x\to\infty}\dfrac{\sqrt{9x^2+17}}{3x-5}$

Sol.: .....

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The first group

1) Find in R the solution set of the following inequality:

$$|5x-2|-2x-1<0$$

Solu: .....

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2) Find in R the solution set of the following inequality:

$$|3x+6|>9$$

Solu: .....

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3) Find in R the solution set of the following inequality:

$$|x+7|<5$$

Solu: .....

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4) Find: $\lim\limits_{x\to\infty} \dfrac{\sqrt{9x^2+17}}{3x-5}$

Solu: .....

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5) Find: $\lim\limits_{x\to\infty} \dfrac{12x^5-8x-7}{3x^5+8}$

Solu: .....

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The second group

1) Find in R the solution set of the following inequality:

$$|\,4x-3\,|-3x+1<0$$

Solu: .....

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2) Find in R the solution set of the following inequality:

$$|\,5x-10\,|>5$$

Solu: .....

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3) Find in R the solution set of the following inequality:

$$|\,x+6\,|\leq 7$$

Solu: .....

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4) Find: $\lim\limits_{x\to\infty}\dfrac{5x^4+2x-1}{6x^4+13}$

Solu: .....

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5) Find: $\lim\limits_{x\to\infty}\dfrac{4x^5-7x-1}{8x^5+5}$

Solu: .....

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The third group

1) Find in R the solution set of the following inequality:

$$|\,2x-1\,|-3x+4<0$$

Solu: .....

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2) Find in R the solution set of the following inequality:

$$|\,4x+12\,|>8$$

Solu: .....

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3) Find in R the solution set of the following inequality:

$$|\,x+1\,|\leq 3$$

Solu: .....

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4) Find: $\lim\limits_{x\to\infty}\dfrac{8x^4+2x^2-7}{2x^5+x-2}$

Solu: .....

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5) Find: $\lim\limits_{x\to\infty}\dfrac{x^5-4x-9}{4x^5+2}$

Solu: .....

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