

Test (CS): Rational Expressions

**Question 1 of 25** ( 91654 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 20  
**Question:** Solve the proportion below.

$$\frac{x}{24} = \frac{7}{6}$$

$x = \underline{\hspace{2cm}}$ .

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 20.

**Question 2 of 25** ( 290283 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 15  
**Question:** Solve the proportion below.

$$\frac{x}{25} = \frac{7}{5}$$

$x = \underline{\hspace{2cm}}$ .

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 15.

**Question 3 of 25** ( 290284 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 21  
**Question:** Solve the proportion below.

$x = \underline{\hspace{2cm}}$ .

Attempt	Incorrect Feedback
1st	

Alg

	<b>Correct Feedback</b>
	Correct!

	<b>Global Incorrect Feedback</b>
	The correct answer is: 21.

### Question 4 of 25 ( 91655 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 18  
**Question:** Solve the proportion below.

$$\frac{9}{x} = \frac{1}{2}$$

x = \_\_\_\_\_.

<b>Attempt</b>	<b>Incorrect Feedback</b>
1st	

	<b>Correct Feedback</b>
	Correct!

	<b>Global Incorrect Feedback</b>
	The correct answer is: 18.

### Question 5 of 25 ( 290285 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 20  
**Question:** Solve the proportion below.

$$\frac{5}{x} = \frac{1}{4}$$

x = \_\_\_\_\_.

<b>Attempt</b>	<b>Incorrect Feedback</b>
1st	

	<b>Correct Feedback</b>
	Correct!

	<b>Global Incorrect Feedback</b>
	The correct answer is: 20.

### Question 6 of 25 ( 290286 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 12  
**Question:** Solve the proportion below.

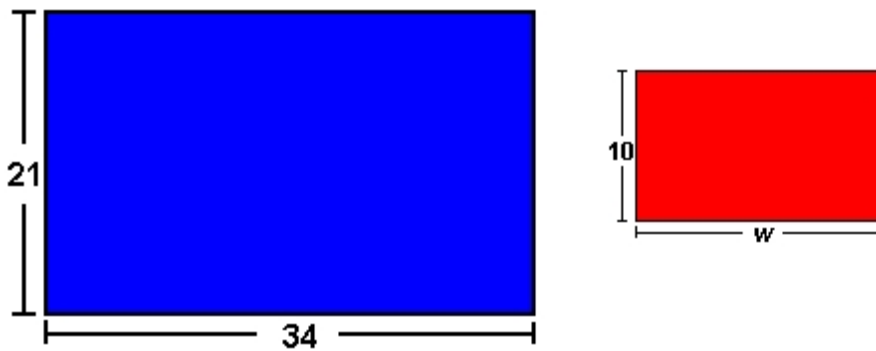
x = \_\_\_\_\_.

Alg

Attempt	Incorrect Feedback
1st	
Correct Feedback	
	Correct!
Global Incorrect Feedback	
	The correct answer is: 12.

### Question 7 of 25 ( 91656 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 16.19  
**Question:** Solve for  $w$ , assuming that the two rectangles below have the same proportions. Round your answer to two decimal places.



$w = \underline{\hspace{2cm}}$ .

Attempt	Incorrect Feedback
1st	
Correct Feedback	
	Correct!
Global Incorrect Feedback	
	The correct answer is: 16.19.

### Question 8 of 25 ( 290287 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 11.33  
**Question:** Solve for  $w$ , assuming that the two rectangles below have the same proportions. Round your answer to two decimal places.

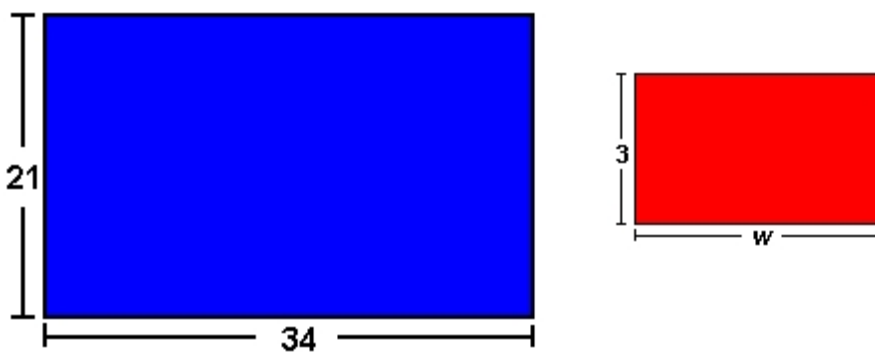
$w = \underline{\hspace{2cm}}$ .

Alg

<b>Attempt</b>	<b>Incorrect Feedback</b>
1st	
	<b>Correct Feedback</b>
	Correct!
	<b>Global Incorrect Feedback</b>
	The correct answer is: 11.33.

### Question 9 of 25 ( 290289 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 4.86  
**Question:** Solve for  $w$ , assuming that the two rectangles below have the same proportions. Round your answer to two decimal places.



$w = \underline{\hspace{2cm}}$ .

<b>Attempt</b>	<b>Incorrect Feedback</b>
1st	
	<b>Correct Feedback</b>
	Correct!
	<b>Global Incorrect Feedback</b>
	The correct answer is: 4.86.

### Question 10 of 25 ( 91657 )

**Maximum Attempts:** 1  
**Question Type:** Multiple Response  
**Maximum Score:** 3  
**Question:** For which value(s) of  $x$  will the rational expression below equal zero? *Check all that apply.*

**Correct Answers:**

	Choice
<b>A.</b>	-1
<b>B.</b>	1
<b>*C.</b>	-2
<b>D.</b>	2
<b>E.</b>	-5
<b>*F.</b>	5

Alg

<b>Attempt</b>	<b>Incorrect Feedback</b>
1st	
	<b>Correct Feedback</b>
	Correct!
	<b>Global Incorrect Feedback</b>
	The correct answers are: -2 and 5.

### Question 11 of 25 ( 290290 )

**Maximum Attempts:** 1  
**Question Type:** Multiple Response  
**Maximum Score:** 3

**Question:** For which value(s) of x will the rational expression below equal zero? *Check all that apply.*

$$\frac{(x-1)(x-5)}{x-5}$$

**Correct Answers:**

	Choice
A.	5
*B.	-5
C.	-1
*D.	1
E.	6
F.	0

<b>Attempt</b>	<b>Incorrect Feedback</b>
1st	
	<b>Correct Feedback</b>
	Correct!
	<b>Global Incorrect Feedback</b>
	The correct answers are: -5 and 1.

### Question 12 of 25 ( 290291 )

**Maximum Attempts:** 1  
**Question Type:** Multiple Response  
**Maximum Score:** 3

**Question:** For which value(s) of x will the rational expression below equal zero? *Check all that apply.*

**Correct Answers:**

	Choice
*A.	3
B.	-3
*C.	-6
D.	6
E.	-7
F.	7

Alg

<b>Attempt</b>	<b>Incorrect Feedback</b>
1st	
	<b>Correct Feedback</b>
	Correct!
	<b>Global Incorrect Feedback</b>
	The correct answers are: 3 and -6.

### Question 13 of 25 ( 91658 )

**Maximum Attempts:** 1  
**Question Type:** Multiple Response  
**Maximum Score:** 3

**Question:** For which value(s) of x will the rational expression below be undefined? *Check all that apply.*

$$\frac{(x - 5)(x + 2)}{x + 1}$$

**Correct Answers:**

	Choice
<b>*A.</b>	-1
<b>B.</b>	1
<b>C.</b>	-2
<b>D.</b>	2
<b>E.</b>	-5
<b>F.</b>	5

<b>Attempt</b>	<b>Incorrect Feedback</b>
1st	
	<b>Correct Feedback</b>
	Correct!
	<b>Global Incorrect Feedback</b>
	The correct answer is: -1.

### Question 14 of 25 ( 290292 )

**Maximum Attempts:** 1  
**Question Type:** Multiple Response  
**Maximum Score:** 3

**Question:** For which value(s) of x will the rational expression below be undefined? *Check all that apply.*

**Correct Answers:**

	Choice
<b>A.</b>	-6
<b>B.</b>	6
<b>C.</b>	-3
<b>D.</b>	3
<b>*E.</b>	-7
<b>F.</b>	7

Alg

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: -7.

### Question 15 of 25 ( 290293 )

**Maximum Attempts:** 1  
**Question Type:** Multiple Response  
**Maximum Score:** 3

**Question:** For which value(s) of x will the rational expression below be undefined? *Check all that apply.*

$$\frac{x+5}{(x+1)(x-1)}$$

**Correct Answers:**

	Choice
A.	-5
B.	5
*C.	-7
D.	7
*E.	-1
F.	1

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: -7 and -1.

### Question 16 of 25 ( 91659 )

**Maximum Attempts:** 1  
**Question Type:** Multiple Choice  
**Maximum Score:** 3

**Question:** Which of the following is equal to the rational expression when x = 2 or -3?

	Choice	Feedback
A.		
B.		
*C.		Correct!

**Global Incorrect Feedback**

The correct answer is:  $\frac{x+1}{x+3}$ .

**Question 17 of 25** ( 290294 )

**Maximum Attempts:** 1

**Question Type:** Multiple Choice

**Maximum Score:** 3

**Question:** Which of the following is equal to the rational expression when  $x \neq -1$  or  $-7$ ?

$$\frac{(x+1)(x-1)}{(x+7)(x+1)}$$

	Choice	Feedback
A.	$\frac{x-1}{x-7}$	
*B.	$\frac{x-1}{x+7}$	Correct!
C.	$\frac{x-7}{x}$	

**Global Incorrect Feedback**

The correct answer is:  $\frac{x-1}{x+7}$ .

**Question 18 of 25** ( 290295 )

**Maximum Attempts:** 1

**Question Type:** Multiple Choice

**Maximum Score:** 3

**Question:** Which of the following is equal to the rational expression when  $x \neq 2$  or  $1$ ?

$$\frac{(x-1)(x-5)}{(x-2)(x-1)}$$

	Choice	Feedback
*A.		Correct!
B.		
C.		

**Global Incorrect Feedback**

The correct answer is: .

**Question 19 of 25** ( 91660 )

**Maximum Attempts:** 1

**Question Type:** Multiple Choice

**Maximum Score:** 3

**Question:** Which of the following is equal to the rational expression when  $x \neq -2$  or  $-1$ ?



Alg

	Choice	Feedback
A.	$\frac{x+2}{x+1}$	
B.	$\frac{x^2-4}{x+1}$	
*C.	$\frac{x-2}{x+1}$	Correct!

Global Incorrect Feedback
The correct answer is: $\frac{x-2}{x+1}$ .

### Question 20 of 25 ( 290296 )

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

Question: Which of the following is equal to the rational expression when  $x \neq 1$  or  $3$ ?

$$\frac{x^2 - 9}{(x - 1)(x - 3)}$$

	Choice	Feedback
*A.	$\frac{x+3}{x}$	Correct!
B.	$\frac{x-1}{x-3}$	
C.	$\frac{x-0}{x-1}$	

Global Incorrect Feedback
The correct answer is: $\frac{x+3}{x-1}$ .

### Question 21 of 25 ( 290297 )

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

Question: Which of the following is equal to the rational expression when  $x \neq -4$  or  $16$ ?

	Choice	Feedback
A.		
*B.		Correct!
C.		

Global Incorrect Feedback
The correct answer is: .

Alg

### Question 22 of 25 ( 485903 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 0  
**Question:** Solve the equation for x.

$$\frac{3x+2}{4} = \frac{5x+1}{2}$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: 0.

### Question 23 of 25 ( 485904 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 4  
**Question:** Solve the equation for x.

$$\frac{3x+2}{2} = \frac{5x+1}{3}$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: 4.

### Question 24 of 25 ( 485905 )

**Maximum Attempts:** 1  
**Question Type:** Numeric Fill In Blank  
**Maximum Score:** 3  
**Correct Answer:** 17  
**Question:** Solve the equation for x.

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Global Incorrect Feedback
	The correct answer is: 17.

Alg

### Question 25 of 25 ( 485906 )

**Maximum Attempts:** 1

**Question Type:** Numeric Fill In Blank

**Maximum Score:** 3

**Correct Answer:** 19

**Question:** Solve the equation for x.

$$\frac{x+2}{3} = \frac{4x+1}{11}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 19.

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