New GCSE Maths: A4 - Simplifying Algebraic Fractions

Name:...... Date:......

What does this simplify to: $\frac{5xy^2}{10y}$ A $\frac{xy^2}{2y}$ B $\frac{5xy}{10}$ C $\frac{xy}{2}$ D $\frac{1}{2}$

Correct Answer: A B C D

Explanation:

What does this simplify to: $\frac{30p}{12}$ $\frac{10p}{4}$ $\frac{5p}{2}$ $\frac{15p}{6}$ Does not simplify

Correct Answer: A B C D

Explanation:

What does this simplify to: $\frac{12q+9}{15}$ $\frac{4q+3}{5}$ $\frac{4q+9}{5}$ $\frac{12q+3}{5}$ Does not simplify

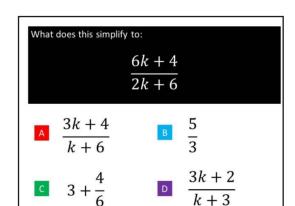
Correct Answer: A B C D

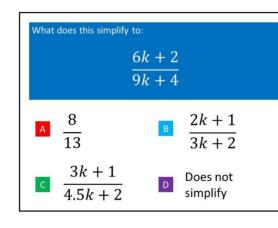
Explanation:

What does this simplify to: $\frac{6m-9}{6m-3}$

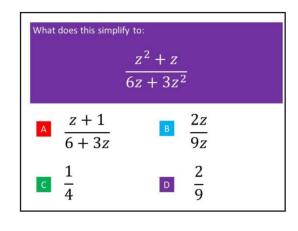
- A 3 B $\frac{2m-3}{2m-1}$
- $\frac{m-3}{m-1} \qquad \qquad -3$

Correct Answer: A B C D
Explanation:





Correct Answer: A B C D	
Explanation:	



Correct Answer: A B C D	
Explanation:	

What does this simplify to:

$$\frac{x^2+2x-8}{x+4}$$

- $A \quad x-2$
- x+2
- $\frac{x-6}{4}$
- Does not simplify

Correct Answer: A B C D

Explanation:

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What does this simplify to:

$$\frac{x^2-1}{x-1}$$

- A r 1
- B x + 1
- С
- Does not simplify

Correct Answer: A B C D

Explanation:

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What does this simplify to:

$$\frac{m^2-4}{2m+4}$$

- A -
- $\frac{m-2}{2}$
- $\frac{m-1}{3}$
- Does not simplify

Correct Answer: A B C D

Explanation:

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What does this simplify to

$$\frac{p^2 - 5p + 6}{p^2 + 2p - 15}$$

- $\frac{p-2}{p+5}$
- $-\frac{2}{5}$
- $-\frac{1}{13}$
- $\frac{p+2}{p-5}$

Correct Answer: A B C D

Explanation:

Write this as a single fraction as simply as possible: $\frac{3g}{2} \times \frac{6g}{9}$ A 1 B $\frac{18g^2}{18}$

Correct Answer: A B C D
Explanation:

Write this as a single fraction as simply as possible: $\frac{3}{10h} \times \frac{8h}{9}$ B $\frac{4h^2}{15}$ C $\frac{4}{15}$ D $\frac{24h}{90h}$

Correct Answer: A B C D
Explanation:

Write this as a single fraction as simply as possible: $\frac{6x+3}{7x} \div \frac{2x+1}{14}$ A $\frac{(6x+3)(2x+1)}{98x}$ B $\frac{2(6x+3)}{x(2x+1)}$ C $\frac{3}{2x}$ D $\frac{6}{x}$

Correct Answer: A B C D
Explanation:

 $\frac{3}{u^2 - 4u + 3} \times \frac{u - 3}{9}$ A $\frac{3}{(u - 1)}$ B $\frac{1}{3(u - 1)}$ C $\frac{3u - 9}{9u^2 - 36u + 27}$ D $\frac{27}{(u - 1)}$

Write this as a single fraction as simply as possible:

Correct Answer: A B C D

Explanation:

Write this as a single fraction as simply as possible:

$$\frac{7}{3x} - \frac{2}{x}$$

- $\frac{5}{3}$
- $\frac{1}{3x}$
- $\frac{5}{3}$
- $\frac{5}{2x}$

Correct Answer: A B C D

Explanation:

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Write this as a single fraction as simply as possible:

$$\frac{2}{x} + \frac{5}{x}$$

- $\frac{7x}{x^2}$
- $\frac{7}{x}$
- $\frac{7}{2x}$
- $\frac{10}{x^2}$

Correct Answer: A B C D

Explanation:

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Write this as a single fraction as simply as possible:

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

- $\frac{5x+7}{(x+1)(x+2)}$ B $\frac{5}{2x+3}$
- $\frac{6}{(x+1)(x+2)}$ $\boxed{ }$ $\frac{2x+3}{(x+1)(x+2)}$

Correct Answer: A B C D

Explanation:

Write this as a single fraction as simply as possible:

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

- A 4
- $\frac{4}{(x-3)(x+2)}$
- $\frac{4x+7}{(x-3)(x+2)} \quad \boxed{ \quad \qquad } \frac{4x+13}{(x-3)(x+2)}$

Correct Answer: A B C D

Explanation:

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Write this as a single	fraction as simply as possible: $\frac{x}{3} + \frac{x}{4}$
$\frac{x^2}{7}$	$\frac{2x}{7}$
$\frac{7x}{12}$	$\frac{2x}{12} = \frac{x}{6}$

Correct Answer: A B C D
Explanation: