Multiplying and Dividing Algebraic Fractions

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

Write this as a single fraction as simply as possible:

$$\frac{3g}{2} \times \frac{6g}{9}$$

A 1 **B** $\dfrac{18g^2}{18}$

C g^2 **D** $\dfrac{g}{2}$

Correct Answer: A B C D

Explanation:

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Write this as a single fraction as simply as possible:

$$\frac{3}{10h} \times \frac{8h}{9}$$

A $\dfrac{4h}{15}$ **B** $\dfrac{4h^2}{15}$

C $\dfrac{4}{15}$ **D** $\dfrac{24h}{90h}$

Correct Answer: A B C D

Explanation:

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Write this as a single fraction as simply as possible:

$$\frac{5n}{2} \div \frac{6n}{10}$$

A $\dfrac{30n^2}{20}$ **B** $\dfrac{3n^2}{2}$

C $\dfrac{25}{6}$ **D** $\dfrac{50n}{12n}$

Correct Answer: A B C D

Explanation:

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Write this as a single fraction as simply as possible:

$$\frac{6x+3}{7x} \div \frac{2x+1}{14}$$

A $\dfrac{(6x+3)(2x+1)}{98x}$ B $\dfrac{2(6x+3)}{x(2x+1)}$

C $\dfrac{3}{2x}$ D $\dfrac{6}{x}$

Correct Answer: A B C D

Explanation:

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The expression $\dfrac{7}{p} \div \dfrac{14}{p}$ simplifies to:

A $\dfrac{98}{p^2}$

B $\dfrac{1}{2}$

C $\dfrac{98}{p}$

D $\dfrac{7p}{14p}$

Correct Answer: A B C D

Explanation:

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Write this as a single fraction as simply as possible:

$$\frac{x^2-16}{3x-15} \div \frac{x^2-2x-8}{x^2-6x+5}$$

A $\dfrac{x^4-6x-80}{x^2-6x+90}$ B $\dfrac{(x-4)(x-5)}{3(x+2)}$

C $\dfrac{(x+4)(x-1)(x-5)}{(3x-15)(x+2)}$ D $\dfrac{(x+4)(x-1)}{3(x+2)}$

Correct Answer: A B C D

Explanation:

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