



New Maths GCSE: A2 - Substitution into Formulae using a Calculator

Name:.....

Date:.....

If $a = -3$ and $b = 2$, then $\frac{5a + 4b}{ab} =$

(A) $-\frac{7}{6}$

(B) $\frac{7}{6}$

(C) $\frac{8}{6}$

(D) $\frac{23}{6}$

Correct Answer: A B C D

Explanation:

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If $x = 2$ and $y = -1$, then $\frac{3x - 5y}{xy^2} =$

(A) $-\frac{11}{2}$

(B) $-\frac{3}{4}$

(C) $\frac{3}{4}$

(D) $\frac{11}{2}$

Correct Answer: A B C D

Explanation:

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If $m = -2$ and $p = 3$, then $\frac{4p - m}{mp} =$

(A) $-\frac{7}{3}$

(B) $-\frac{5}{3}$

(C) $\frac{5}{3}$

(D) $\frac{7}{3}$

Correct Answer: A B C D

Explanation:

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The algebraic expression $6x^2 + 9x + 3$ represents the area of a rectangle. What is the area of the rectangle when $x = 3$ feet?

A. 51 square feet
 B. 60 square feet
 C. 66 square feet
 D. 84 square feet

Correct Answer: A B C D

Explanation:

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$a = -0.1, b = 2.5, c = -0.5$

$\frac{b}{ac} - 4bc = ?$

A: 45	B: -55
C: -45	D: 55

Correct Answer: A B C D

Explanation:

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$a = 36, b = -2, c = \frac{1}{9}$

$\frac{2b}{\sqrt{a}} - \sqrt{ac} = ?$

A: $-\frac{4}{3}$	B: $\frac{4}{3}$
C: $\frac{8}{3}$	D: $-\frac{8}{3}$

Correct Answer: A B C D

Explanation:

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$a = -0.5, b = 0.16, c = -0.1$

$\frac{a^2 - \sqrt{b}}{c} = ?$

A: 1.5	B: 6.5
C: -2.1	D: -6.0

Correct Answer: A B C D

Explanation:

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$a = -\frac{1}{2}, b = -1, c = \frac{1}{9}$

$b^3 a \sqrt{c} = ?$

A: $-\frac{1}{6}$	B: $\frac{3}{2}$
C: $\frac{1}{6}$	D: $-\frac{3}{2}$

Correct Answer: A B C D

Explanation:

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$a = -2, b = 3, c = \frac{1}{4}$

$\frac{\frac{1}{\sqrt{c}} + \frac{b}{a}}{3c} = ?$

A: $\frac{8}{3}$	B: $\frac{2}{3}$
C: $\frac{14}{3}$	D: $-\frac{2}{3}$

Correct Answer: A B C D

Explanation:

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If $\frac{1}{f} = \frac{1}{3} + \frac{1}{4}$, then $f =$

(A) $\frac{7}{12}$

(B) $\frac{17}{12}$

(C) $\frac{12}{7}$

(D) 7

Correct Answer: A B C D

Explanation:

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