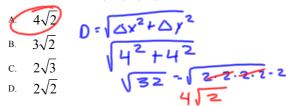
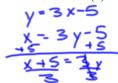
Simplify 
$$\frac{n^2-16}{n^2+n-20}$$
 $(n+4)$ 
 $(n+4$ 

What is the distance from (-3,-2) to (1,-6)?



What is the inverse of f(x) = 3x - 5?



Which is the equation that is parallel to y = 5x - 2 and goes through (1, 1)?

A. 
$$5x - y = 4$$
  
B.  $5x - 2y = 3$ 

C. 
$$5x + y = 6$$
  $y - 1 = 5(x - 1)$ 

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$$5x - y = 4$$
  
B.  $5x - 2y = 3$   
C.  $5x + y = 6$   
D.  $-5x - y = -6$ 

$$y - y = 5(x - 1)$$

$$y - 1 = 5(x - 1)$$

$$y - 1 = 5x - 5$$

$$y - 1 = 5x - 5$$

$$y - 1 = 5x - 4$$

$$y = 5x - 4$$

$$5x - y = 4$$

$$\begin{cases} y = 3x - 1 \\ y + x = 15 \end{cases}$$

$$3x - 1 + x = 15$$

$$4x - 1 = 15$$

$$x = 4 \quad \therefore y = 11$$

What is the distance from (2, n) to (4, n + 2)?

$$D = \sqrt{\Delta x^2 + \Delta y^2}$$

$$\sqrt{8} = 2\sqrt{2}$$

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Factor 
$$5a^2 + 10a^3$$
  
 $5a^2(1+2a)$ 

Find the equation of the line, in slope intercept form, that goes through the point (2, -1) and (3, -5)

$$y-y_{1} = m(x-x_{1})$$

$$y+1 = -4(x-2)$$

$$y+1 = -4x+8$$

$$y+1 = -4x+7$$

$$y=-4x+7$$

How many different ways can one answer a 10 question multiple choice test that has options A, B, C, and D?

$$\frac{215!}{213!} = \frac{215 \cdot 214 \cdot 213 \cdot 121}{213 \cdot 213 \cdot 121}$$

$$= 46,010$$

$$\frac{2}{2} \frac{3}{4} \cdot \frac{3}{-1} \frac{-2}{-4}$$

$$\frac{6+-3}{6+-4} \frac{-4-12}{-4-16} = \frac{3}{2} \frac{-16}{2}$$

$$\begin{bmatrix} 2 & 3 \\ 5 & 9 \end{bmatrix} \bullet \begin{bmatrix} 2 & 3 \\ 2 & 4 \end{bmatrix}$$

Simplify 
$$\frac{n^2-16}{n^2+n-20} = \frac{6 - 47}{(n+4)} \frac{(n+4)}{(n+5)}$$

$$\frac{n+4}{n+5} \left[ \frac{n+4}{n+5} \right]$$

$$n+4 \frac{n^2+5n-2}{n^2+4n}$$

$$\frac{n+4}{n-6}$$

$$\left(\frac{n^2y^{-2}}{a^{-4}}\right)^2 = \left(\frac{n^2a^4}{y^2}\right)^2$$

$$\frac{n^2a^4}{y^2} \cdot \frac{n^2a^4}{y^2} = \frac{n^4a^4}{y^4}$$
Factor  $(3n^3+12n^2) + (n+4)$ 

$$3n^2(n+4) + 2(n+4)$$

$$(3n^2+2)$$

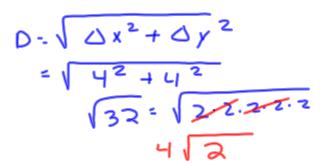
If f(x) = 3x - 10 and g(x) = 2x + 1, what is f(g(x))?

$$f(2x+1) = 3(2x+1) - 10$$
  
6x-7

What is the distance from (-3,-2) to (1,-6)?

A.  $4\sqrt{2}$ 

- B.  $3\sqrt{2}$
- c.  $2\sqrt{3}$
- D.  $2\sqrt{2}$



What is the inverse of f(x) = 3x - 5?

Which is the equation that is parallel to y = 5x - 2 and goes through (1, 1)2

A. 
$$5x - y = 4$$

B. 
$$5x - 2y = 3$$

C. 
$$5x + y = 6$$

D. 
$$-5x - y = -6$$

$$y-y_1=m(x-x_1)$$
  
 $y-1=5(x-1)$   
 $y-1=5x-5$   
 $y=5x-4$   
 $y=5x-4$   
 $1[-5x+y=-4]$   
 $5x-y=4$ 

$$\begin{cases} y = 3x - 1 \\ y + x = 15 \end{cases}$$

$$3x - 1 + x = 15$$

$$4x - 1 = 15$$

$$x = 4 \therefore y = 11$$

What is the distance from (2, n) to (4, n + 2)?

$$D = \sqrt{2^3 + 2^2}$$

$$\sqrt{8}$$

$$\sqrt{8}$$

Factor 
$$5a^2 + 10a^3$$

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$$y-y_1 = m(x-x_1)$$
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 $y+1 = -4x+7$ 
 $y=-4x+7$ 

How many different ways can one answer a 10 question multiple choice test that has options A, B, C, and D?

$$\begin{bmatrix} 2 & 3 \\ 5 & 9 \end{bmatrix} \bullet \begin{bmatrix} 2 & 3 \\ 2 & 4 \end{bmatrix}$$