4-21. Plot ΔABC on graph paper with points $A(2, 2)$. $B(-2, -2)$. and $C(8, -2)$. 4-21 HW eTool Homework Help

a. Use the function $(x, y) \rightarrow (-1x, -1y)$ to transform ΔABC. Graph and connect the new points then label this triangle $\Delta A'B'C'$. Describe how ΔABC has been transformed. What. if anythin triangle has been preserved in its image?

b. Now use the function $(x, y) \rightarrow (-2x, -2y)$ to transform the original ΔABC to create $\Delta A''B''C''$. Has ΔABC undergone a rigid transformation to create $\Delta A''B''C''$? What. if anything. abou has been preserved in its image?

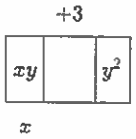
4-22. Rewrite each of the following products as a sum by using the Distributive Property. Homework Help

a. $5x(x - 6)$

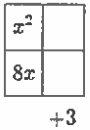
b. $-9y(6 - 3y)$

4-27. For each area model. fill in the missing parts. Write an equation showing that the area as a sum equals the area as a product. Homew

a.



b.



4-28. If $f(x) = 3 - |x|$ and $g(x) = 3^x + 5$. then calculate the value of: Homework Help

a. $f(-5)$

b. $g(4)$

c. $f(0)$

d. $f(2)$

e. $g(1)$

f. $g(0)$

4-29. Solve the equations below by first rewriting each equation as a simpler. equivalent equation. Check your solutions. Homework Help

a. $\frac{2}{7}x + 2 = \frac{3}{10}$

b. $\frac{9}{50} + \frac{6x}{25} = \frac{3}{10}$

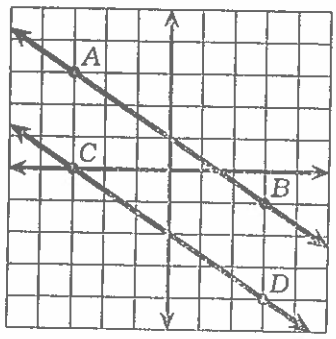
Part 1. Write the equation of the line indicated.

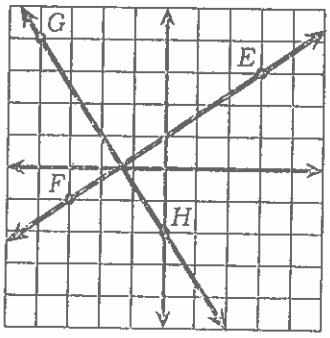
U Equation of $\overleftrightarrow{AB}$

O Equation of $\overleftrightarrow{CD}$

I Equation of $\overleftrightarrow{EF}$

S Equation of $\overleftrightarrow{GH}$





Part 1 Answers

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

17 $y = -\frac{2}{3}x + 1$

24 $y = -\frac{3}{2}x - 2$

20 $y = -\frac{3}{2}x + 1$

2 $y = -\frac{2}{3}x - 2$

Part 2. Write the slope of a line parallel to the given line.

T $y = \frac{7}{4}x - 2$

U $y = 8 - 3x$

O $-5x + y = 12$

A $4x + 7y = 21$

Part 2 Answers

18 $\frac{12}{5}$ 3 $\frac{7}{4}$ 10 $-\frac{7}{4}$

6 5 21 $-\frac{4}{7}$ 26 -3

Part 3. Write the slope of a line perpendicular to the given line.

E $y = -\frac{5}{4}x + 1$

H $y = 6x + 11$

O $2x + 5y = 40$

T $8x - 3y = 15$

Part 3 Answers

3 $\frac{5}{4}$ 23 $-\frac{3}{8}$ 13 $-\frac{1}{6}$

16 $\frac{5}{2}$ 4 $\frac{4}{5}$ 15 $-\frac{8}{3}$

Part 4. Write an equation for the line that is parallel to the given line and that contains the given point.

W $y = 3x - 4; (2, 7)$

Y $y = -\frac{1}{2}x + 5; (4, -5)$

Part 4 Answers

1 $y = -4x + 1$ 18 $y = \frac{5}{3}x - 3$

12 $y = -\frac{1}{2}x - 1$ 10 $y = 3x + 1$

Part 5. Write an equation for the line that is perpendicular to the given line and that contains the given point.

U $y = -\frac{1}{3}x + 4; (2, 5)$

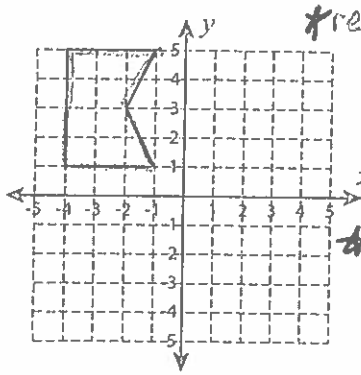
T $y = \frac{2}{5}x - 3; (2, -3)$

Part 5 Answers

14 $y = -\frac{5}{2}x + 7$ 3 $y = \frac{2}{3}x + 4$

20 $y = -4x - 5$ 25 $y = 3x - 5$

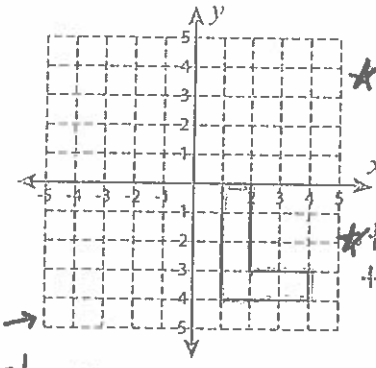
5) 90° clockwise rotation



* reflect it over the x-axis

* Translate it left 2 and down 1

6) 90° counterclockwise rotation



* reflect it over the Y axis

* translate it to the left 3 and up 1

new shapes →

3 new shapes