

# Patterns, Equations, and Graphs Assignment

Tell whether the given equation has the ordered pair as a solution.

1.  $x = y + 6$        $(3, -3)$

2.  $y - 6 = 3x$        $(1, 9)$

3.  $y - 2x = 3$        $(5, 12)$

4.  $y = 2x + 3$        $(-3, -3)$

5.  $y - 6x = 2$        $(2, 13)$

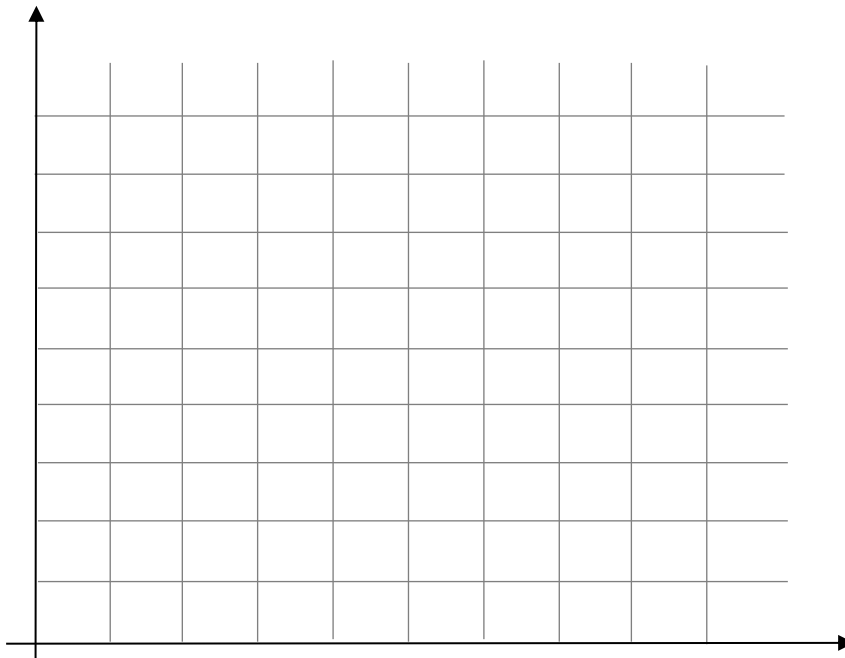
6.  $y = x - 2$        $(2, 1)$

7.  $x + 7 = y - 3$        $(3, 12)$

8.  $x - 8 = 3y$        $(11, 1)$

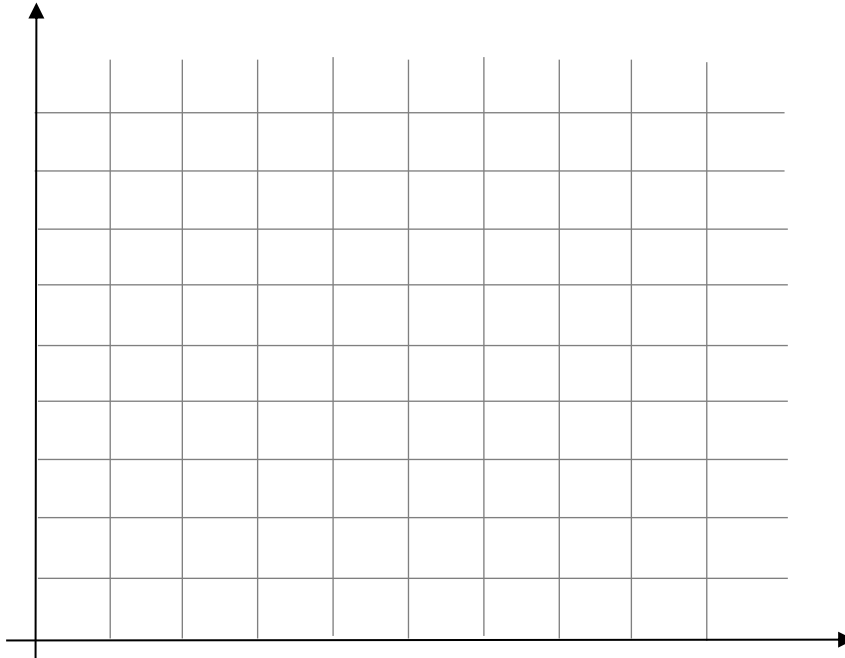
Use a table, an equation, and a graph to represent each relationship.

9. Susy makes 3 bracelets per hour.



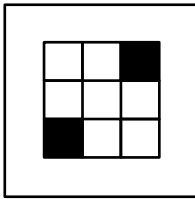
# Patterns, Equations, and Graphs Assignment

10. Tina earns \$2.5 for every hour babysitting.

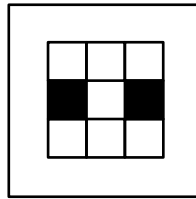


Predict the next figure in the each sequence.

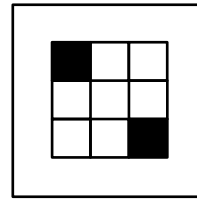
11.



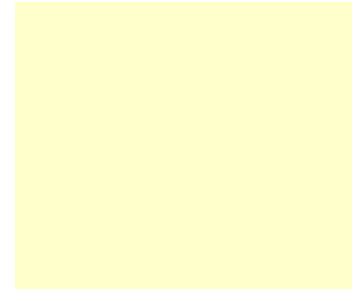
i.



ii.



iii.



iv.

**Patterns, Equations, and Graphs** Assignment**ANSWER**

Tell whether the given equation has the ordered pair as a solution.

1.  $x = y + 6$  (3, -3)

$$\begin{aligned}x &= y + 6 \\3 &= -3 + 6 \\3 &= 3\end{aligned}$$

2.  $y - 6 = 3x$  (1, 9)

$$\begin{aligned}y - 6 &= 3x \\9 - 6 &= 3(1) \\3 &= 3\end{aligned}$$

3.  $y - 2x = 3$  (5, 12)

$$\begin{aligned}y - 2x &= 3 \\12 - 2(5) &= 3 \\12 - 10 &= 3 \\2 &\neq 3\end{aligned}$$

4.  $y = 2x + 3$  (-3, -3)

$$\begin{aligned}y &= 2x + 3 \\-3 &= 2(-3) + 3 \\-3 &= -6 + 3 \\-3 &= -3\end{aligned}$$

5.  $y - 6x = 2$  (2, 13)

$$\begin{aligned}y - 6x &= 2 \\13 - 6(2) &= 2 \\13 - 12 &= 2 \\1 &\neq 2\end{aligned}$$

6.  $y = x - 2$  (2, 1)

$$\begin{aligned}y &= x - 2 \\1 &= 2 - 2 \\1 &\neq 0\end{aligned}$$

7.  $x + 7 = y - 3$  (3, 12)

$$\begin{aligned}x + 7 &= y - 3 \\3 + 7 &= 12 - 3 \\10 &\neq 9\end{aligned}$$

8.  $x - 8 = 3y$  (11, 1)

$$\begin{aligned}x - 8 &= 3y \\11 - 8 &= 3(1) \\3 &= 3\end{aligned}$$

# Patterns, Equations, and Graphs Assignment

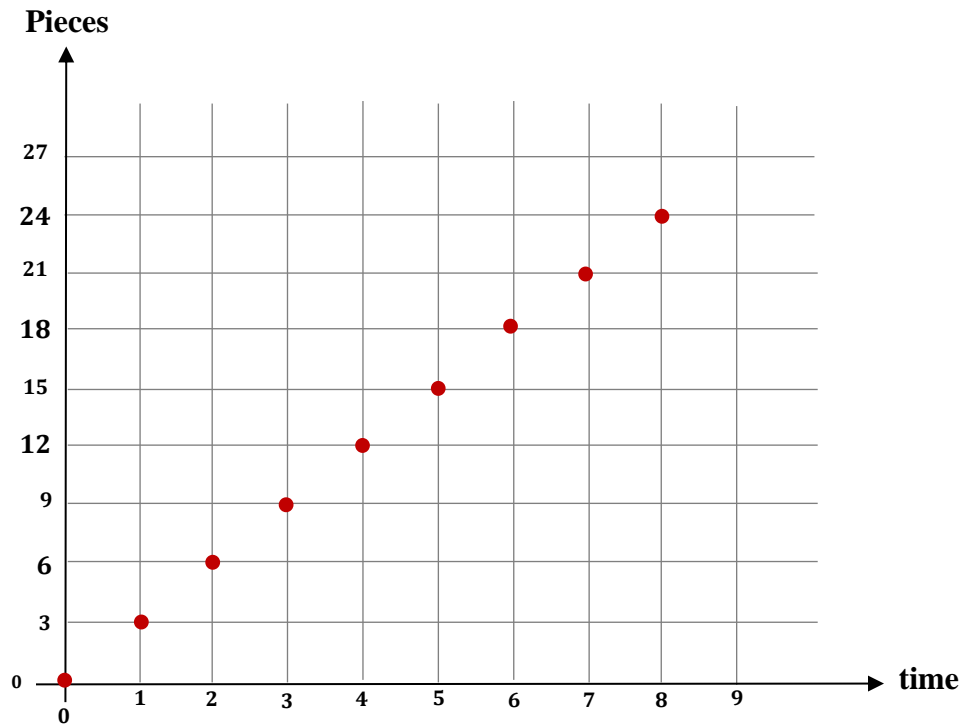
Use a table, an equation, and a graph to represent each relationship.

9. Susy makes 3 bracelets per hour.

$$p = 3(t)$$

Where:  $p$  = Total number of bracelets made  
 $t$  = number of hours

$t$ (hour)	$p$ (pcs)
0	0
1	3
2	6
3	9
4	12
5	15
6	18
7	21
8	24



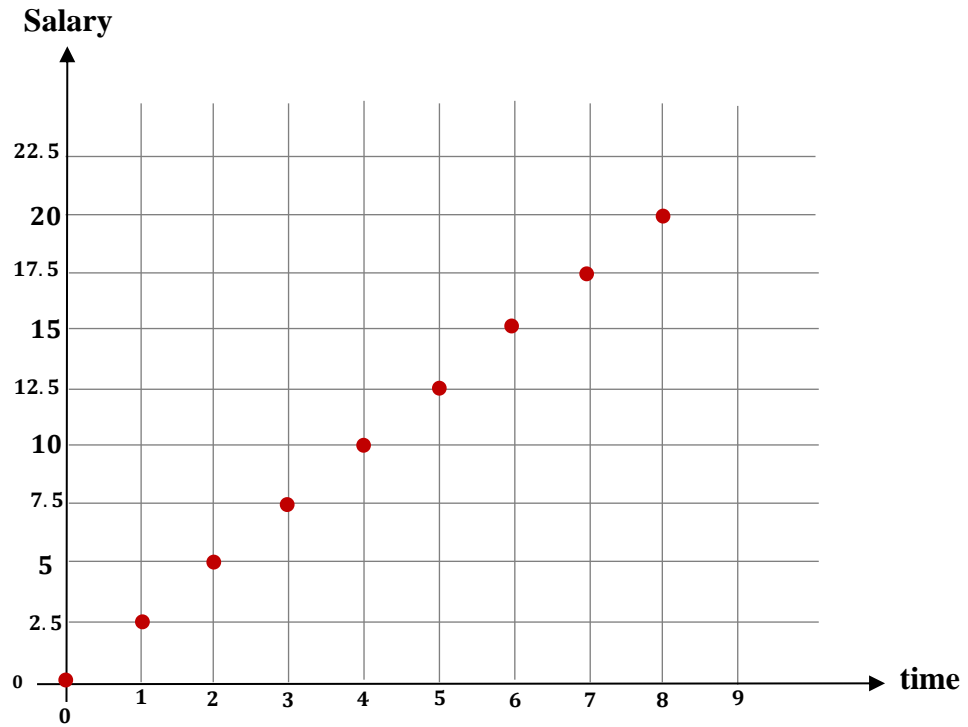
# Patterns, Equations, and Graphs Assignment

10. Tina earns \$2.5 for every hour babysitting.

$$s = 2.5(t)$$

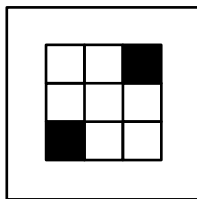
Where:  $s$  = Total salary  
 $t$  = number of hours

$t$ (hour)	$s$ (\$)
0	0
1	2.5
2	5
3	7.5
4	10
5	12.5
6	15
7	17.5
8	20

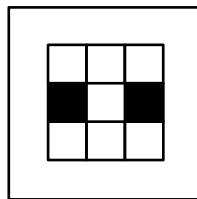


Predict the next figure in the each sequence.

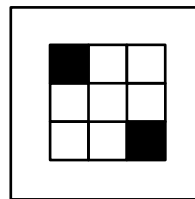
11.



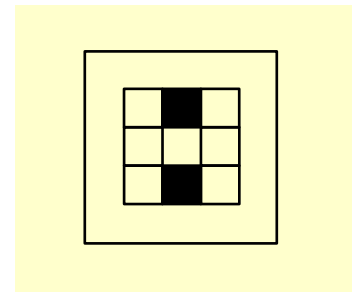
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