Name: _____ Class: _____ Date: _____ ID: A

Direct Variation

Numeric Response

1. The value of y varies directly with x, and $y = 6$ when $x = -2$. Find y when $x = 6$.

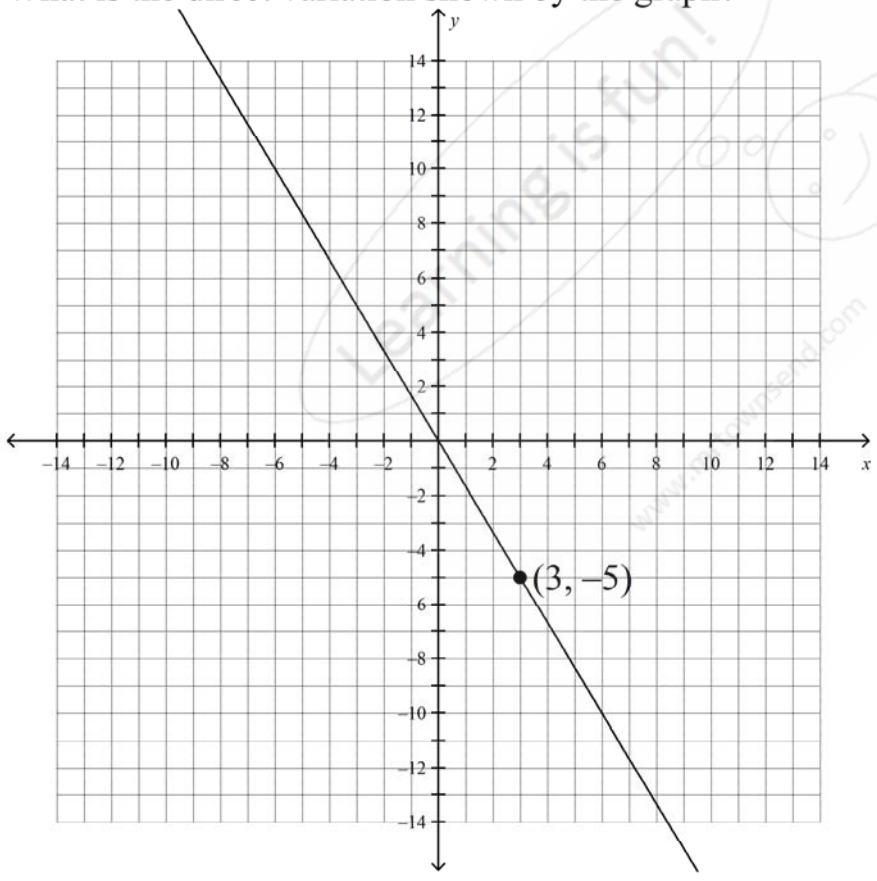
2. The value of y varies directly with x, and $y = -2$ when $x = 7$. Find x when $y = 10$.

3. The value of y varies directly with x, and $y = 7$ when $x = 2$. Find y when $x = 8$.

4. The value of y varies directly with x, and $y = 7$ when $x = 7$. Find x when $y = -21$.

Short Answer

5. What is the direct variation shown by the graph?



6. Write the following equation as a direct variation:
$-9x + 2y = 0$

7. Write the following equation as a direct variation:
$7x + 7y = 0$

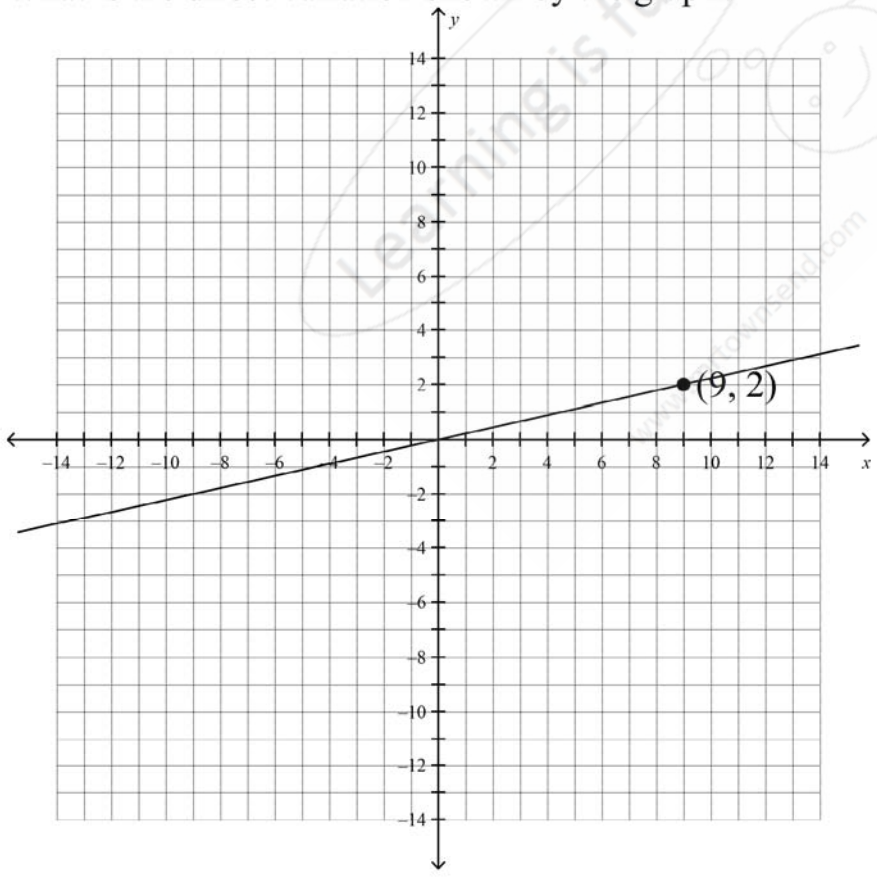
8. What is the constant of variation for the following?

x	–5	–25	–25
y	–7	–35	–35

9. What is the constant of variation for the following?

x	–5	20	–25
y	–3	12	–15

10. What is the direct variation shown by the graph?



Direct Variation
Answer Section

NUMERIC RESPONSE

1. ANS: -18

   PTS: 1
2. ANS: -35

   PTS: 1
3. ANS: 28

   PTS: 1
4. ANS: -21

   PTS: 1

SHORT ANSWER

5. ANS:
   $y = (-5/3)x$

   PTS: 1
6. ANS:
   $y = (9/2)x$

   PTS: 1
7. ANS:
   $y = (-1)x$

   PTS: 1
8. ANS:
   $\frac{7}{5}$

   PTS: 1
9. ANS:
   $\frac{3}{5}$

   PTS: 1

10. ANS:
$y = (2/9)x$

PTS: 1