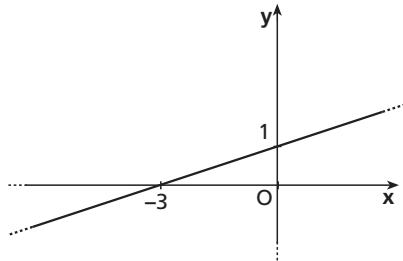


 **TEST YOUR SKILLS**

1 TEST Select the equation that matches the graph.



- [A] $y = 3x + 1$ [C] $y = 3x + 3$
 [B] $y = -3x + 1$ [D] $y = \frac{1}{3}x + 1$

(USA Temple College, Texas, Practice Test, 2005)

2 TEST If the graphs of $2y + x + 3 = 0$ and $3y + ax + 2 = 0$ are to meet at right angles, then a is:

- [A] -6. [B] 6. [C] $-\frac{2}{3}$. [D] $\frac{3}{2}$. [E] 0.

(USA North Carolina State High School Mathematics Contest, 2003)

3 TEST What is the equation of the perpendicular bisector of the segment with endpoints $(-12; 15)$ and $(4; -3)$?

- [A] $y = \frac{8}{9}x + \frac{86}{9}$
 [B] $y = -\frac{8}{9}x + \frac{22}{9}$
 [C] $y = \frac{9}{8}x + \frac{33}{2}$
 [D] $y = \frac{8}{9}x - \frac{28}{3}$

(USA Catawba College NCCTM Mathematics Contest, 2005)

4 Determine all points on the straight line which joins $(-4; 11)$ to $(16; -1)$ and whose coordinates are positive integers.

(CAN Canadian Open Mathematics Challenge, 1997)

[(1; 8), (6; 5), (11; 2)]

GLOSSARY

endpoint: estremo
graph: grafico
to join: congiungere

to match: combaciare
to meet-met-met: incontrarsi

perpendicular bisector: asse
right angle: angolo retto
straight line: linea retta