Answer key

The method: Equation from a slope and a point

Put the slope and the point into y = mx + b. Solve for b.

Slope −6, through (3, −26): $y = -6x - 8$

$-26 = (-6)(3) + b$ put m = −6 and the point (3, −26) into y = mx + b

$-26 = -18 + b$

$b = -8$ add 18 on both sides

$y = -6x - 8$

Problems 1 and 2 worked out · Version 0A

Slope −2, through (4, −3): $y = -2x + 5$

$-3 = (-2)(4) + b$ put m = −2 and the point (4, −3) into y = mx + b

$-3 = -8 + b$

$b = 5$ add 8 on both sides

$y = -2x + 5$

Slope 5, through (−3, −19): $y = 5x - 4$

$-19 = 5(-3) + b$ put m = 5 and the point (−3, −19) into y = mx + b

$-19 = -15 + b$

$b = -4$ add 15 on both sides

$y = 5x - 4$

Equation from a slope and a point · Version 0A

1) $y = -2x + 5$ 2) $y = 5x - 4$ 3) $y = 4x - 8$
4) $y = 2x + 3$ 5) $y = -3x - 7$ 6) $y = -5x + 6$
7) $y = -3x - 5$ 8) $y = 3x + 8$ 9) $y = 6x - 10$
10) $y = 6x - 4$